



LEARN. HAVE FUN.

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# THE WILDSIDE



What Am I?: A striped nudibranch (*Arminia californica*).

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## THE WILDSIDE

Fall 2018

When you shop at [smile.amazon.com](https://www.smile.amazon.com), select Harbor WildWatch as your charity of choice and we will receive a donation. Thank you!

### GET YOUR FEET WET

We are lucky to have knowledgeable interns every season who bring a diversity of backgrounds and interests to Harbor WildWatch. Kiana Ford and Mason Ward spent their summer interning with us. Before they returned to school, we chatted with them about their internship experiences!



**Where are you from? What university do you go to and what are you studying?**

**Kiana:** I grew up in Juneau, Alaska, went to high school in Chicago, and just moved to Gig Harbor last year with my family. I'm studying at the University of Miami (class of 2019). My majors are Marine Science and Biology, and I am minoring in Chemistry and Ecosystems Science and Policy.

**Mason:** I'm from Water Valley, Mississippi, but moved when I joined the Navy in August 2013. When I transferred to the area in February 2014, I knew I wanted to stay. I'm studying at the University of Washington - Tacoma (class of 2020), dual-majoring in Business Management and Environmental Sustainability.

**Can you tell us a highlight of your Harbor WildWatch internship?**

**Kiana:** I had the opportunity to lead a beach walk on my own at Kopachuck State Park. It ended up being a beautiful day, and we found at least five different moon snails, but more than that, it was a really cool opportunity!

**Mason:** During beach monitoring at Maple Hollow park, we saw a fair-sized, healthy sunflower sea star. It was really uplifting, especially knowing that this species was hit really hard by sea star wasting disease.

**What have you learned through your internship experience?**

**Kiana:** I've definitely learned a lot more about the Pacific Northwest and the watershed in the area. And shadowing Stena and Rachel has been awesome and taught me a lot; they are amazing educators!


**Mason:** I've learned how to educate rather than opionate, especially at booths and local events. It can sometimes be tough to stay neutral! I'm also slowly learning how to identify different species on the beach, and have really enjoyed embodying Harbor WildWatch's motto of "Learn. Have fun," by still having fun while learning a lot on the job.


**Any advice for future interns?**


**Kiana:** Take advantage of all the events and don't be afraid to lead some of them. Also, pick everyone's brains on topics that you're interested in — there are always super knowledgeable students, Steward Club members, and program go-ers.

**Mason:** Be prepared for a lot of fun and sometimes unexpected turns... that still end up being really fun. In other words, be prepared to be a cowboy and always ready to "shoot from the hip!"

### OUR STAFF

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### UPCOMING EVENTS

**Make Waves:**  
4th Annual Benefit for Environmental Education  
September 13, 6-8:30 pm,  
The Club @ The Boatyard

**Cocktails & Fishtales\***  
September 19, October 17,  
November 21, 5:30-7 pm

**Donkey Creek Chum Festival**  
November 17, 12-4 pm,  
Harbor History Museum

**Pier Into The Night\***  
October 6, November 3,  
December 1, January 5,  
February 2, March 2

**Winter Citizen Science Beach Monitoring**  
December 2018 and January 2019, stay tuned for dates!

\*Check our website calendar and Facebook for times and locations!



WHAT AM I?  
ANSWER ABOVE

### WHAT'S INSIDE

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## The Humboldt Squid Discovery

One of my favorite questions to get while on the beach is, “What’s that smell?” I like to think of it as an indicator that we’re about to find something really cool! Once it led to the discovery of the headless body of a sixgill shark, another time a dead harbor seal, and most recently, a large chunk of squid. We were alerted to the unidentified mass on Sunrise Beach by a family leaving the beach just as we were getting started with a Harbor WildWatch beach walk. This *Get Your Feet Wet* Program suddenly had a new mission: find the smelly carcass!



And sure enough, we did! A mass of bright white tissue with a thin layer of reddish skin was washed up below the strand line left behind by the most recent high tide. Initially we had yet to determine the identity of the mysterious form. As we examined it with careful pokes and prods, we recognized that the ring of smelly tissue was part of a squid’s mantle, a muscular tube that makes up the squid’s body. Additionally, we found what looked like a large icicle. I had a proud educator moment when Dylan Shipman, the *seaStars & Beyond* student who was volunteering with me that day, correctly identified the structure as the squid’s pen, which is a supportive structure in the mantle and a vestige of the squids shelled ancestors. When we’re not on the beach, Harbor WildWatch delivers hands on science lessons and Dylan remembered what the pen was from a squid dissection we had done with his class — yessss!

The next obvious question was: “What type of squid?” The most common species of squid found in Washington waters is *Loligo opalescens*, a species more commonly known as market squid, but sometimes referred to as Pacific squid or opalescent squid. Market squid measure less than a foot in size; including mantle and tentacles, the average market squid is about eight inches. That’s puny compared to squid parts we were examining! This prompted me to send a picture to our amazing science advisor Dr. Mike Behrens at Pacific Lutheran University and ask, “What kind of squid do we have in the Puget Sound that’s this big?”



It turns out that Humboldt squid (*Dosidicus gigas*) have been observed beyond their historic range of the Eastern Pacific waters between Peru and central Mexico. While they are not the largest species of squid, Humboldt squid earned the nickname “jumbo squid” by their sheer size. They grow up to 2 meters (6 feet) and weigh as much as 110 pounds. Sightings of these large, voracious predators have occurred as far north as Canada and the Gulf of Alaska and include observations from fisherman in the Strait of Juan de Fuca (which is well beyond their typical range). A 2007 study by the Monterey Bay Research Institute revealed a longterm expansion of Humboldt squid’s range from the waters of Central California. This range expansion happened to coincide with a period of ocean-scale warming and a notable reduction in top predators who competed for food in the same area, like tuna and billfish. While it is unclear how the oceanic ecology will respond to the expansion of this predator, there is concern that the increased range of the Humboldt squid now extensively overlaps that of a large commercially valuable groundfish population off the west coast. There are similar concerns about the Humboldt squid’s expansion south as well.

While these more northern sightings of Humboldt squid could help explain our rare find, it’s reassuring to know that, for now, there is not a sustained Humboldt squid population off the Washington coast. The potential threat to ecological communities and the fishing industry, as well as anecdotes of their aggressive nature towards divers makes me think we’re just fine with only finding squid remains. Here’s my final question: “What will we find next?!”



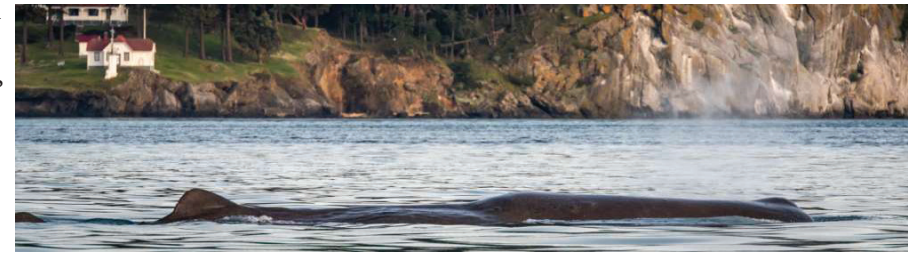
“You could have easily mistaken the squid pen for an icicle if they were side by side!”  
- Dylan Shipman, *seaStars & Beyond* Student (who discovered the Humboldt squid with Stena).

## A Brief Bite of Squid

Contributing author  
Carly Vester, Communications Specialist

The exciting find of a Humboldt squid during a summer Harbor WildWatch beach walk brought about many intriguing questions. Why was it washed up on Sunrise Beach? And what creatures prey on Humboldt squid?

The most common predators of the squid include tuna, sharks, dolphins, and, our *Creature Feature*, sperm whales.



A sperm whale visits the Salish Sea in April 2018. Photo Credit: Jeff Friedman, Courtesy of The Seattle PI

Sperm whales can be found worldwide, but have certain areas that they prefer for feeding and breeding. This, unsurprisingly, includes the warmer waters of Mexico and California, where the Humboldt squid calls home. To answer the unasked question: yes, they have been spotted in Washington!

Just this past April, a sperm whale surprised a whale watching boat in the Salish Sea. It was an extremely rare, possibly unprecedented, occurrence. The last time a sperm whale was known to be in the vicinity of these waters was 1984, when the clicks of one was picked up on a hydrophone.

Sperm whale vocalizations are among the loudest sounds in nature, reaching up to 200 decibels, or about 3,000 times more powerful than the sound of a jet engine at takeoff. The whale watchers later told the “Seattle PI” that the clicks they heard sounded like a nail gun.

Sperm whales are the largest toothed whales in the world, with adult males growing up to 65 feet long (that’s the length of five school buses lined up!). They have distinctive, block shaped heads (think “Moby Dick”), and are known for diving immense depths for their prey, like Humboldt squid. This propensity for deeper water is the main reason why they are rarely sighted by humans near coastlines.

The sighting in April left whale watchers perplexed, but ecstatic. Similar to the mystery of the Humboldt squid on one of our beaches, whale researchers aren’t sure why the almost 45-foot-long whale ended up in the Salish Sea. It could be a sign that they are returning to areas they once visited, that prey is moving this direction, or — pun intended — simply a fluke.

## CREATURE FEATURE

### Trashtopus: The Effects of Trash

On July 5, 2017, when I was a Jr. Naturalist in the *seaStars & Beyond* program, I scoured Purdy Beach for my service project. With help from volunteers, we collected 12 large bags of trash from 4th of July fun the night before. The amount of garbage was devastating. I recycled what I could and used the garbage to create a powerful statement about the effects of trash on Puget Sound creatures. I sculpted the trash into a large octopus, also known as “Trashtopus,” who is surrounded by litter and other sea creatures. All the critters are confused by the unfamiliar objects, and are trying to consume the harmful garbage. Over the last year, I have enjoyed using Trashtopus to teach the public about what happens to trash in the Sound and that it is our duty as citizens of the South Sound to keep our waters clean for the animals. - Morgan Kelly, age 12.



Trashtopus is now on display outside of the Skansie Visitor and Interpretive Center.

## KIDS CORNER

All of the proceeds from our 4th annual benefit *Make Waves* will be dedicated to youth environmental education, with a goal of raising \$25,000 for youth education programs. Join us on September 13 at The Club @ The Boatyard!



Our generous sponsor for the event is the **Gig Harbor Branch of U.S. Bank**. They are located on the corner of Pioneer and Stinson, just off of the City Center Exit. We asked them to share a little bit about themselves: “At U.S. Bank, we are a team of specialists who can service your personal, business, and wealth management needs. With over 100 years of combined experience, our staff is comprised of leaders who are here to better our community. As a core value, we put people first to develop relationships that provide us an understanding of our client’s current needs and future goals, ultimately becoming their trusted advisor. Here at U.S. Bank, we invest our hearts and minds to power human potential.”

