

Miller Bay Guardian

Fall 2020



Paul Dorn - FOMB President

Photo: Linda Dorn

Paul's Perspective

Of the impressive collection of native animals living in Miller Bay watersheds, the shy, retiring and predominately vegetarian black bear, honed by evolution to thrive in environments as varied as Southern swamps and boreal forests, has always been one of my favorites. I have been blessed to view them feeding on salmon returning to Cowling and Grovers Creeks for over 40 years.

Recently, I joined Great Peninsula Conservancy staff at a hidden Grovers Creek vantage point to videotape a momma bear teaching her two cubs how to catch salmon. GPC's video, posted on their website, shows the family exiting the stream onto the Tucker property, the latest GPC acquisition along Grovers Creek and just north of the Miller Bay Preserve, which was acquired last year with your help. Not shown on the video are our wide grins while filming the obvious joy of the two cubs bounding after Mom with their meal secured firmly in her jaws.

The Friends of Miller Bay's collaboration with the Great Peninsula Conservancy focuses on habitat acquisition and protection of acreages like the Tucker property. In addition to black bear, quality habitat is essential for our local deer, coyote, mink, river otter, bobcat, cougar, skunk, beaver, bat, vole, mole, shrew, mice, raccoons, and opossum populations. Sadly, in recent decades several native animal species have disappeared from Miller Bay's watersheds including red fox and mountain

beavers. It's our hope to head off further species declines, especially of Chinook salmon and steelhead, by preserving quality habitat. Fortunately, protecting freshwater and nearshore habitat for one species benefits many other species. Everything is connected.

Streams are wildlife highways. Replacing culverts, that block fish passage, with bridges provides a safe route for many other animals, greatly reducing road kill (who wants to run down bear or a beaver?). Restoring natural fish and wildlife corridors benefits all of us, especially when they connect forest reserves, park land and waterfront. The resulting green belts along Miller Bay's streams and shoreline are a major reason we enjoy living here. Trails constructed by FOMB and the North Kitsap Heritage Park stewards provide us an opportunity to enjoy these spaces. In turn, the forests absorb our carbon dioxide, produce oxygen, and are home to incredible assemblages of insects, birds, reptiles, amphibians, and invertebrates; many we don't often see, but whose presence plays an important role in the ecosystem.

The FOMB's board gratefully appreciates your support and financial contributions and extends our heartfelt wish that all members, and our entire community, stay healthy and strong during the Covid-19 pandemic.

Sincerely, Paul



Black Bear at Grover's Creek

Photo: Paul Dorn

Our Mission: To improve quality of life by preserving natural habitats in the Miller Bay watershed.

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Why do we care?

Are Invasive Green Crabs Here?

by Betsy Cooper

In 2016, when invasive European green crabs were first found on San Juan Island, media coverage left a lot of folks on Washington's coast scratching their heads. Why the sudden concern? After all, green crabs were first detected in Willapa Bay and Grays Harbor several decades ago, starting in 1998, and had mostly disappeared. But in the last few years, shellfish growers have started finding more green crabs.

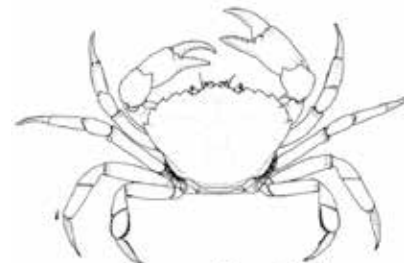
Congrats Dick and Nancy D'Archangel!

by Paul Dorn

FOMB Board Members Dick and Nancy received the high honor of being selected the Great Peninsula Conservancy's 2020 Gary Allen Cunningham Conservation Award recipients. All of us on the Board, and our membership, extend our heartfelt congratulations to two outstanding community environmental activists. We appreciate your dedication, leadership, and energy in making the world around us a better place for all living creatures. Your work has honored Virginia Cowling's memory, a former recipient of this award, a founding member of FOMB, and one of your staunchest friends and mentor.



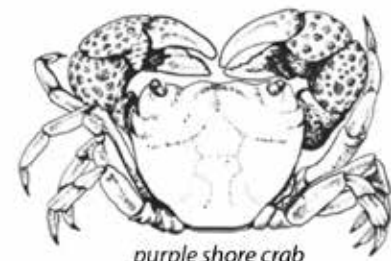
Cowling creek flows into Miller Bay Photo: Nancy D'Archangel



European Green Crab



hairy shore crab



purple shore crab

In 2017, the Makah Tribe discovered a population of green crabs larger than any found along inland Washington shorelines at the mouths of the Wa'atch and Tsoo-Yess rivers. These observations have raised the alarm that Washington's coastal estuaries could be under threat of invasion and called for renewed efforts to assess the status of green crab populations throughout the Salish Sea.

In response to this need, Washington Sea Grant is collaborating with Washington Department of Fish and Wildlife (WDFW) and University of Washington researchers to assess the presence and extent of invasive European green crab populations on the Pacific coast.

Local groups in north Kitsap have gotten involved sur-

veying sites in Kingston (Carpenter Creek, just north of the S. Kingston bridge near Arness Park) and at Doe-keg-Wats. For the last 3 years these sites have also been monitored monthly between April and September to identify the shore crabs inhabiting the shallow mudflats and thalweg (stream channel). This monitoring has found no European Green Crab but does provide inventories of the native crabs inhabiting these areas (purple shore crab (*Hemigrapsus nudus*) and hairy shore crab (*Hemigrapsus oregonensis*) along with other critters (young Dungeness crab, staghorn sculpin, shiner perch, three-spined stickleback, shiner perch) that get into the traps during an overnight deployment.

The European green crab's (*Carcinus maenas*) native distribution is in the northeast Atlantic Ocean and Baltic Sea, ranging along coasts from northern Africa to Norway and Iceland therefore it is adapted to harsh conditions.

The green crab is an effective predator, adept at opening bivalve shells, and has been blamed for harming the soft-shell clam industry on the U.S. East Coast. It preys on numerous organisms, such as clams, oysters, juvenile crab, and shellfish making green crab potential competitors for the food sources of native fish and bird species.

The green crab's ability to reproduce rapidly means they can produce a large population of crabs quicker than native shore crabs, and they grow much faster than the native crabs, so they could overtake native populations if left unchecked. This crab can also be host to a worm that harms shorebirds.

So far none have been found in Kitsap County, but they have been found in the Dungeness spit area and in Sooke in BC. To learn more about the European green crab or the work to track its movements in the Salish Sea check out <https://www.nps.gov/articles/early-detection-of-european-green-crab.htm> or <https://wsg.washington.edu/category/outreach/environmental-threats/green-crab-monitoring/> to learn more.🐞



Former FOMB board member Betsy Cooper is an environmental scientist who worked for many years in New York City's Dept. of Environmental Protection. After moving to Kingston in 1996, she worked for 20 years with King County's Dept. of Natural Resources. Now retired, she continues as an ardent environmentalist & community volunteer. She currently participates in Stillwater's green crab monitoring program and readily agreed to write an article for us about the invasive Green Crab.

Native Olympia Oysters in Puget Sound 100 Acre Goal Reached

In our 2018 newsletter, we reported that Betsy Peabody from Puget Sound Restoration Fund had supervised the creation of an oyster reef in Miller Bay, just out from the outlet of Cowling Creek. Twenty mesh bags were anchored to the bottom of the bay with 1000 oysters planted in each bag on a substrate of Pacific oyster shells. Paul Dorn has been keeping an eye on these Miller Bay oyster beds and doing any needed maintenance and removal of oyster drill snails.

When Betsy Peabody started this work 10 years ago, the goal was to create 100 acres of Olympia oyster beds in the Puget Sound area. In early October, PSRF created another 15 acres of oyster reef in Liberty Bay which will bring the total acreage up to the 100 acre goal. Historically there were 10,000 to 20,000 acres of these native oyster beds in Puget Sound but only about 150 acres occurring naturally when the project was started.

According to Betsy, Olympia oysters, Washington's only native oyster species, exist sparsely, but not in dense enough populations to create the necessary oyster bed habitat. The dense populations create structure and habitat for other sea creatures and serve as the shells that native Olympia oysters larvae will latch onto. They create important ecological benefits that enhance food webs.

"The habitat created helps filter water as shellfish do, but it also will benefit crabs, small fish and invertebrates. This will in turn benefit salmon, which feast on invertebrates. The health of the salmon population is necessary to the health of the endangered Southern Resident orca, which rely on salmon as its primary prey." Kitsap Sun 10/9/20

We'll keep updating you on the progress of Miller Bay's oyster reef.🐞



Fisher Swanson helping to clean oyster beds

Photo: Paul Dorn

In 2018 we shared in our newsletter an essay that Emma Saas submitted to NOAA when she applied for a summer internship. That essay told of growing up on Miller Bay and how that shaped her deep love for the marine environment. Emma did receive that internship and the following article resulted from some of her research that summer. She is now pursuing a degree in marine biology and has an internship with the University of California at Santa Cruz.



At the time Emma wrote this article she was a research assistant at a lab at University of Alaska Fairbanks, helping with thematic analysis on interview transcripts for fishers' knowledge of rockfish and management in the Gulf of Alaska.

Should rockfish qualify for Social Security?

Some Important Tips for Protecting Rockfish

by Emma Saas



Photo: KathleenReed

Should rockfish qualify for Social Security? Yelloweye rockfish, listed as a threatened species in Puget Sound (WDFG), can live to be 118 years old. This listing came after Yelloweye rockfish had been targeted as part of a booming Washington fishery and their susceptibility to overfishing became a concern. Reproduction doesn't occur until 5-20 years of age, and even that depends on a variety of ocean conditions that change every year. Also living in our back yard, bocaccio rockfish are dubbed as endangered. Though difficult to age, bocaccio possibly live up to 50+ years- maybe not Social Security eligible, but old enough to have some good stories to tell.



Yelloweye Barotrauma

Photo: Oregon State University

area, and are often caught incidentally by people targeting other species. Rockfish, as the bottom-dwellers they are, are reeled up through such intense pressure changes when caught that they experience potentially lethal barotrauma. Their eyes may bulge out, and their stomachs protrude from their mouths. But there is hope! With a descender, rockfish can be re-pressurized if they are released at the same depth at which they were caught.

There are more formal machines that can do this, but for casual sport anglers who don't want to invest, a weighted milk crate can be used (<https://www.youtube.com/watch?v=oaXpBMY0rM>). Some anglers puncture the inflated stomach, thinking they are helping the rockfish depressurize, but this is a misconception and harms the fish. 🐟



Pacific Tree Frog

Photo: Tom Doty

Tom tells it like it is!

Saving Amphibians

by Tom Doty

At the risk of alienating some of your readership, I think specific bullet points, aimed at preserving amphibian populations, are warranted. To wit, some tactics/approaches that might inspire action:

- Push for laws and regulations that are more responsive to the genuine decline in amphibian species diversity that we are experiencing. Understand that Kitsap County does not protect any fishless wetland under 0.25 acre, exactly the habitats upon which most amphibian populations are dependent for reproduction.

- Advocate for educational reform. Our current educational system has failed miserably at the task of instilling a sense of environmental ethic or reverence.

- Understand that saving species (and the ecosystems in which they play functional roles) may result in some personal inconvenience.

- Support organizations such as the Great Peninsula Conservancy who do the real work of environmental preservation. Save land and water for their inherent attributes.

- Align yourself with watchdog groups such as Kitsap Environmental Coalition opposing agricultural/ forestry dependence on environmental toxins. The fact that more people don't die following exposure to these chemicals is testament to our innate waterproofing. Not so for amphibians, alone among vertebrates. Even fish are waterproof!

- Be aware that many environmentally friendly activities, i.e. gardening, picking up litter, laboring on invasive removal, or buying 'eco-friendly' merchandise, are innately satisfying but are irrelevant to the task of saving amphibians.

- Get involved eco-politically. Write letters. Protest. Make phone calls. Make noise. Get in the way. Be annoying. Get in "good trouble". It's not only effective, it is, in fact, the only recourse we have if we truly wish to save amphibians.

Unless we take action, we're whistling past the amphibian graveyard. 🐸



Long-toed Salamander

Photo: Tom Doty

Tom Doty is a Miller Bay resident and an emeritus professor of biology who has worked tirelessly as a park steward for North Kitsap Heritage Park. Dick and I have been running into him regularly on the trails for the past 5 years and we are always impressed by his willingness to share his vast knowledge of amphibians and his passion for protecting them. Tom was happy to send us several

articles for our newsletter that he had written. Upon reflection though, he sent us a list of bullet points that might be the best way to effect changes for these critters. These may make many of us squirm uncomfortably, but perhaps hitting us over the head with a hammer will cause a small change that could dramatically improve conditions for amphibians!





This year's haul...

Photo: Paul Dorn

You can help.....

3rd Annual Bay Cleanup

Despite a delay due to the Covid pandemic, FOMB determined that we could conduct the annual beach cleanup safely. With the help of many of you who cleaned their own beaches, it went well on a beautiful August evening. There was a slight glitch however with the pickup of trash bags when the motor that Jim & Carol Haskins had on their inflatable quit about half way through. Luckily Paul Dorn and Dick D'Archangel were able to offer assistance. Approximately 2 dozen bags were transported to the transfer station along with 3 old tires, an antique washer wringer, various pieces of old metal, and an inflatable raft that had filled with sand and must have weighed close to 300 pounds. (Michael Flynn gets credit this year for wrestling it out of the beach after a 5 hour battle!)

As always we are very grateful to Matt Mattson for his assistance in allowing us to use his facility! 🐾

FOMB has been asked....

Should I feed the wildlife?

By Michelle Amicucci

Many people enjoy feeding wildlife because it allows them to have close contact with the animals, or because they believe they are helping the animals survive. While seeing wild animals up close can be enjoyable, providing wild animals with a steady, human-supplied food source nearly always leads to problems for both the animals and humans (song birds being one exception).

There are many good reasons not to feed wildlife including:

1. When young wild animals are taught to depend on a human-provided food source, they may not fully develop essential foraging skills. .
2. Wild animals who are used to being fed by humans commonly lose their fear of people.
3. The food humans usually feed to wild animals is not nutritionally complete, and it can cause serious health problems for the animals,
4. A constant, human-provided food source may attract many more wild animals to the area than would normally be found there.
5. Reproduction rates may also be affected when an artificial food source is readily available.
6. The Progressive Animal Welfare Society (PAWS) commonly receive phone calls at the Wildlife Center from people whose neighbors have been feeding wild animals. Often the wild animals have become an incredible nuisance and the caller wants to kill or remove them.

There is some disagreement about whether or not putting out bird feeders in your backyard is 'acceptable' or not, as they can attract predators, and virulent diseases like avian pox which can be spread through contaminated feeders. But even if its impact is not always positive for wildlife, it is positive for us. The British nature writer Mark Cocker holds that the "simple, Franciscan act of giving to birds makes us feel good about life, and redeems us in some fundamental way." This sense of personal redemption is intimately tied up with the history of bird-feeding. The practice grew out of the humanitarian movement in the 19th century, which saw compassion toward those in need as a mark of the enlightened individual.

The best thing you can do to care for the wild animals on your property is to give them habitat, not handouts. Naturoscaping is a great way to provide the animals with natural sources of food and shelter that will not put them in danger the way a human-provided food source will. You will still be able to enjoy wildlife on your property, but at a safe distance for both you and the animals.

Sources: Humane Society Wildlife Land Trust, The New York Times and PAWS.org 🐾

Some interesting facts

The Bird Count

by Michelle Amicucci



This year will be a short one for counting birds. FOMB stopped counting the birds on Miller Bay to ensure the safety of our birding group in the midst of the COVID-19 pandemic. This gave me an opportunity to delve into some interesting things about birds we see on Miller Bay like Great Blue Heron powder down and why some birds have yellow feet. These are excerpts from BirdNote.org, who kindly gave us permission to use their information in our newsletter.

“Great Blue Heron are known for their exquisite soft blue feathers, with lavender-gray on their necks and reddish shadowing around their shoulders. Do they have a special feather-care routine to keep them looking so sleek?

Well, maybe something like that. They are one of the few groups of birds that produce powder down. Hidden below the outer breast feathers are patches of special down feathers. These feathers are never molted. They grow continuously, and the tips break down into a dust the consistency of talcum powder. Using a fringed claw on its middle toe, the heron collects some of the dust—called powder down—and works it into its feathers. Sort of like the way you might work conditioner into your hair.



Greater Yellowlegs

Photo Gregg Thompson

And herons are special. Most birds don't have powder down feathers, except for some parrots, pigeons, and doves ... and tinamous ... and bustards. It's an odd list of birds that aren't closely related.

This magical beauty powder may help herons waterproof their feathers, while removing fish gunk and other grunge. It may also add luster to the feathers, which could be important during the breeding season.”

“Greater Yellowlegs [which you can frequently observe on Miller Bay] are shorebirds with bright yellow legs and feet. Ever wonder why? Perhaps it's so they can see them

better! Wading in shallow water to capture small fish and insects, a yellowlegs can keep track of its legs by their bright color contrasting with the sometimes dark and irregular bottom. Keeping track of toes allows quick movements without a misstep.

A Sanderling, on the other hand, has black legs and feet. Running up the sandy beach in front of an advancing wave, it, too, is aware of every step, as those black toes stand out against the pale sand. It turns out that shorebirds that forage on dark substrates, such as mudflats, usually have pale legs, while those on paler substrates, such as sand beaches, have dark legs. Mother Nature is good with the fine details.

How about the brilliant orange legs of Ruddy Turnstones? Well, they forage just about anywhere on the shore, and those orange legs stand out like a neon light. Black-necked Stilts have bright pink legs and, like yellowlegs, they wade in water, where one bright color is probably as good as another.”

“Let's talk about nests. Every spring, robins build their cup-shaped nests using grass and mud. Orioles weave a hanging sack. It takes a week or two, it's hard work, and yet once the chicks fledge, mostly the structures won't be reused.

Cliff Swallows, on the other hand, will often reuse nests. They'll spend a week plastering their mud structure on a sheer cliff face, use it, and the next year — unless parasites have moved in before them — fix it up and they're good to go.

Bigger birds — herons, hawks, or eagles — often reuse a nest for many years. One Bald Eagle pair in Vermilion, Ohio, reused the same nest for 34 years, adding branches each year until it weighed more than two tons. But Europe's migratory White Storks get the award for best reuse. One nest site, still used in 1930 and likely seeing many repairs over the years, dated back to 1549. That's a continuous series of stork pairs nesting in one spot for 381 years.”

I hope the waning days of 2020 find all of our Miller Bay Friends well and looking forward to jumping back into the bird count sometime in 2021! Listen to podcasts? Subscribe to “Birdnote” for a daily 2-minute podcast about...you got it, birds! 🐦

Source: BirdNote.org (authors: Bob Sundstrom and Dennis Paulson)

Twenty-five years ago

The Posse Rides Again - Boating Regulations

“DO YOU KNOW that in Kitsap County it's illegal to operate a boat in excess of 7 knots per hour—or fast enough to create a wake—within 150 feet of any shoreline, pier, breakwater or restricted area? Many boaters and jet-skiers operating on Miller Bay don't seem to know the rules.” - Miller Bay Citizens Action Group newsletter Vol.1 No. 9, August 1994 (former name of FOMB)

Although twenty-five years have passed since those words were written, they are still the current county boating regulations.

Please respect your neighbors by observing these rules, especially in the upper narrower portion of the bay. 🐦



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98392

WE ARE REALLY PROUD OF OUR WEBSITE! CHECK IT OUT AT:
FRIENDSOFMILLERBAY.ORG

2020 FOMB Annual Meeting

Join us on ZOOM November 5 at 7 pm

Glimpses of Wetlands with John F. Williams

Join Zoom Meeting: <https://us02web.zoom.us/j/8705453313>

Wetlands are an important part of our watersheds, and Miller Bay is no exception. John will show samples of Salish Magazine's recent issue on wetlands, and he will show how the magazine highlights things that people can see firsthand in our local public forests and beaches. John will connect some of the general ideas about wetlands with Miller Bay and some of the creeks that flow into it. 🌿



Besides being our annual speaker this year, John Williams is a gifted photographer and videographer. He is also the publisher of Salish Magazine, which takes inquisitive readers outdoors with in-depth storytelling about what people can see firsthand in our public forests and beaches.

“.....Salish Magazine uses 21st century methods to deliver engaging stories.”

A key focus of the magazine is to illustrate the interconnectedness woven through our ecosystems, using lenses of history, science, and culture. From in-depth views of mushrooms to the mysterious lives of sea anemones, Salish Magazine uses 21st century methods to deliver engaging stories that are interactive, rich in visual imagery, scientifically correct, yet fun to read.

The magazine is available online at: salishmagazine.org.



Beaver

Photo: John F Williams