



SPOTLIGHT ON... BEST BEACH BEHAVIORS

Visiting the beach is a long standing summer tradition here in Western Washington, whether it's to dip your toes in the water, play in the sand or rocks, lounge in your beach chair, or dig for shellfish. With such a short summer beach season, and more and more people enjoying our lovely beaches, what you do and don't do at the beach can mean life and death for our native beach and nearshore creatures, and for you. Read on for how you can be your beach's best friend.



Photo by Gary Purves

water. When the water's healthy, the shellfish are safe to eat. But any contaminants in Puget Sound near your beach can accumulate in shellfish. Contaminated shellfish can make you very sick if you eat them.

Biotoxins are especially worrisome: there is NO antidote for biotoxin poisoning, and high levels can be lethal! Biotoxins are marine toxins that can concentrate in shellfish to dangerous levels, making the shellfish unsafe to eat. Paralytic Shellfish Poisoning (PSP or "red tide"), Amnesic Shellfish Poisoning (ASP or "domoic acid"), and Diarrhetic Shellfish Poisoning (DSP or "okadaic acid") are the biotoxins commonly found in Washington's marine waters. Biotoxins are not destroyed by cooking or freezing.

Other illness-causing things in shellfish include the norovirus, a highly contagious disease that has many sources. When found in marine water, shellfish can ingest norovirus, sometimes to unhealthy levels. There's also a bacteria called vibrio. Normally found in fish and shellfish without any ill effects, warm weather can cause vibrio to multiply rapidly in fish and shellfish, which can make it a human health concern.

To be safe, stay informed. Before you head to the beach, ALWAYS check to see if a beach is approved and open for recreational harvest. You can do this several different ways:

**Call BEFORE you Dig!
Your life may depend on it!**

You've probably heard this mantra before, but we're not talking about your backyard here. Learning if the beach you want to dig for shellfish on is open or closed (due to pollution or marine toxins) should be first on your list of 'must do's' before you even start packing. What's the big deal? Well, shellfish are filter feeders. To eat, they filter large amounts of water daily, taking in algae and other particles, good and bad, from the

- Check the WA Department of Health’s website for a map of recreational beaches closed to harvest
- Read the Health Department’s Shellfish Safety Bulletin for recreational closures, listed by county
- Call the 24-hour Shellfish Safety Hotline **1-800-562-5632** for recorded information on closure

Beach Etiquette

Being a polite guest at the beach is your best approach to keeping intertidal creatures alive and well. It’s like visiting a new friend’s home for the first time. Would you move things around, leave messes for them, hurt them, snoop in their drawers and cupboards, or put their very life at risk? I didn’t think so. Here’s how you can have fun on the beach and still be respectful.



Photo by Gary Purves

1. Walk around tidepools and barnacle-covered rocks, instead of stepping in/on them. Barnacles are living animals and your weight can easily crush them to death. Tidepools are important nurseries and safety zones for ocean life, so stomping around in one – even if you don’t see anything – can also be damaging. Walk on bare spots as much as possible, at a slow safe pace.

2. Enjoy the sea life with wet and gentle hands. It’s easy to get captivated by the incredible variety of marine critters on the beach, and want to examine them more closely. It’s best for them if you wet your hands in seawater before you touch or handle them. You have natural (and maybe artificial) oils on your skin that are foreign and may be harmful to sea life. Plus lifting them from their home may cause stress, disturb or wreck their home, and make it impossible for them to protect themselves or hide from predators. Prying creatures off of rocks may kill actually them. The best way to check out a tidepool is to kneel or squat quietly, keep your hands out of the pool, and simply watch.

3. Be a crafty, no-trace detective. Looking under rocks and seaweed is part of the surprise and mystery of being at the beach. Be sure to lift rocks carefully (so as not to squash anything underneath). Replace rocks exactly the way you found them because - chances are - you just played with somebody’s house. Many small organisms live under rocks and seaweed to protect themselves from air, sun and predators. Leaving them uncovered destroys their home and possibly them, too.

4. Leave all vegetation and seaweed where you find it. Plants in the water and on the beach prevent erosion, are food for many animals and insects, provide shelter from predators and extreme temperatures, and add variety and beauty to the beach. From eelgrass to rockweed, these plants and algae all play a role in the nearshore web of life. Sea lettuce, the most common green seaweed, for example, not only provides food and shelter in the water – it covers small creatures trapped on the beach when the tide goes out. Without this cover from predators and protection from the drying out under the sun, many of these small animals would perish.

5. Refill that hole. Be sure to refill any holes that you dig in the sand. Leftover piles of sand may suffocate other marine life below it. Plus a beach full of holes and piles is not a pretty sight, and stepping in a hole may cause a leg or ankle injury. In other words, leave the area as good as - if not better - than you found it.

6. Give sea birds and mammals lots of space. Respect the wildlife that you see by giving them plenty of space to go about their business. They are probably eating or resting and nobody wants to be disturbed at mealtime or during a nap. IF they startle or move away as you approach, that's your clue to go no closer.

Fires on the Beach

Beach fires are often another great part of going to the beach. However, driftwood fires are a genuine concern to firefighters and neighboring residents. Because of the dangers involved, beach fires should only be built (IF allowed legally) under strictly controlled circumstances. Here's how to have a fun and SAFE fire on the beach.

1. Check to see if fires are legal. Your local park, city or county government will know if it's legal to have a beach fire. In some areas, fires are always illegal. Do not build a beach fire when a burn ban is in effect.

2. Bring your own wood. Don't burn beach driftwood, as this is likely part of somebody's home. Sometimes wood found on the beach contains creosote, which when burned, can create hazardous fumes that you should not breathe. Burning salt impregnated wood can also release dioxin which is a persistent toxin that can accumulate in animal tissues.

3. Make your fire above the ordinary high water mark. This minimizes the damage to little critters that make their home on the beach and under your feet.

4. Usually a small campfire is legal without a burning permit – IF you meet all of these requirements:

- the fire is at least 50 feet from any structure
- the fire is less than three feet across and less than two feet high
- you have a full bucket of water and shovel handy nearby
- there is always somebody present to watch/control the fire
- the surrounding area is free of flammable materials (driftwood, beach plants, leaves, etc)
- you douse a fire completely with water prior to leaving (use the shovel to mix water deeply into the ashes until there is no more smoke coming out)



Shhh! Quiet in the Eelgrass Nursery

You might not have paid much attention to the flat-bladed “seaweed” growing at the shoreline’s edge. Or maybe you wondered what was beneath it when the tide was out. The truth is that unassuming green stuff is actually a critical part of our marine ecosystem and the nearshore food web.

Eelgrass beds are like rich underwater meadows. They serve as nurseries, feeding beds and hideouts for seabirds, marine mammals, fish, shellfish and other intertidal and sea life. Eelgrass meadows also anchor fine sediments in place and soften the force of waves hitting the shoreline.



Photo by Sterling Udell & Teresa Petrykowski

Structures like docks prevent eelgrass from getting enough light to grow; the Department of Ecology estimates that about one-third of our state’s eelgrass beds have been lost due to development.

Resources

- Shellfish Safety Information, WA Department of Health, <http://ww4.doh.wa.gov/scripts/esrimap.dll?Name=bioview&Step=1>
- Biotoxins - Myths and Misconceptions, WA Department of Health, <http://www.doh.wa.gov/Portals/1/Documents/4400/332-064-BiotoxinMyths.pdf>

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