



TILLAMOOK COUNTY WATER TRAIL OREGON



N E T A R T S W A T E R S H E D



Produced by the Tillamook Estuaries Partnership



WELCOME TO NETARTS BAY

With the publication of the Netarts Bay water trail guidebook, a chapter closes for the local water trail community. It was over ten years ago that the Tillamook County Water Trail (TCWT) vision was brought forth. Since then, the five watersheds of Tillamook County have been celebrated through four guidebooks which reveal the uniqueness and similarities of local waterways and entice paddlers to explore further.

Though the guidebooks are now complete, it is not the end of this endeavor. It will be exciting to see what blossoms from this experience and the efforts inspired by water trail enthusiasts. The TCWT has been a huge success, offering information that may not otherwise get into the hands of visitors, residents, and non-motorized paddlers. This project demonstrates that stewardship can happen in a thoughtful way, gently guiding folks in a direction of a healthy environment, while balancing recreation, community, and economy.



Don Best, Best Impressions Picture Co.

Netarts Bay invites one to slow down, breathe deeply, and take a closer look. The bay is relatively small at just under four square miles. There are 14 streams and tributaries that encompass the entire 19 square mile watershed. Some wander through wetlands and others flow directly to the bay. The small community of Netarts lies at the north end of the bay and neighboring Oceanside is close

by. Netarts Bay and its surroundings offer spectacular opportunities to enjoy nature including birding, clamming, crabbing, paddling, and beachcombing. Nestled in the crook of Cape Meares and Cape Lookout, Netarts Bay does not disappoint with things to do or see.

Tillamook County Water Trail – The Vision

The Tillamook County Water Trail encourages the quiet exploration and discovery of the ecological, historical, social, and cultural features of Tillamook County from the uplands to the ocean.

The Water Trail is a recreational and educational experience that promotes and celebrates the value of Tillamook County's waterways with direct benefit to the economic, social, and environmental well-being of the County.

The Water Trail enhances the identity of Tillamook County by establishing an alternative, low-impact way to enjoy and appreciate the wonders of all five Tillamook County estuaries.



Sunset at Netarts Bay by Dale Harmer

What is a Water Trail?

A water trail is a path on a waterway connected through signs, maps, and access points providing a scenic and educational experience for non-motorized recreational users.

EARLY NETARTS



One might imagine that long ago, the primary draws to Netarts Bay were the wealth of marine-dependent food sources such as shellfish and the relative protection from the elements afforded by the headlands at both ends of the bay. It is believed that Native Americans inhabited Netarts Bay as early as the 1400's. In this sometimes harsh environment of wind, rain, and ocean-

driven storms, flourished a resilient culture that relied heavily on the waterways and what they offered. They were undoubtedly an advanced seafaring and woodworking society, using timbers from the adjacent coast range to carve their water craft. This distinctive type of transport allowed fishing, hunting, and trade to thrive. Homes were built close to this resource to allow easy access for transportation in and out of Netarts Bay and the bounty the estuary and ocean provided.

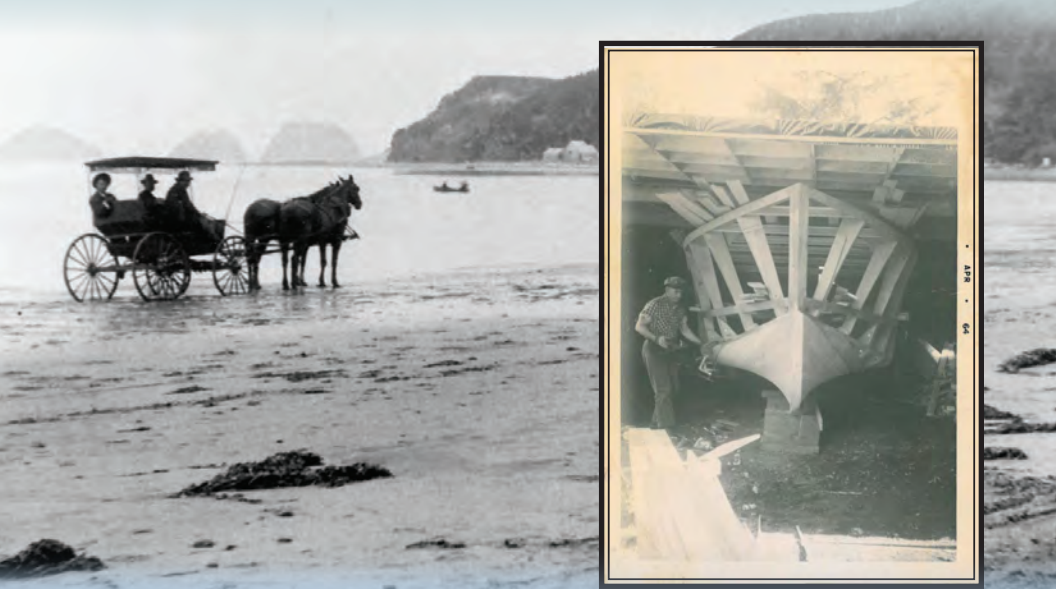
These deep ties to land and water are still a key part of the economy of the area today. As Oregon settlers discovered Netarts they too understood the importance of these estuarine and oceanic resources. The area has long been the site of commercial crabbing both inside the bay and the nearby ocean; boat building for sport, ferrying, and ocean-going vessels; oyster farming; and sea salt manufacturing.



Above: Free Trader, 1897, Courtesy Tillamook County Pioneer Museum
Below: Netarts Bay by Jim Young



It was not all work around Netarts Bay. With names like 'Happy Camp' and 'Whiskey Creek', it is evident that the good times were rolling! Early on, vacationers were known to travel to Netarts Bay and stay for weeks at a time. Clamming, fishing, and beach bathing were favorite ways to spend the day. The rocks north of Netarts Bay invited investigation of the colorful intertidal life, including green anemones and purple sea urchins. The extraordinary beauty of the area still draws tourists today. The northern end of the Netarts Spit has been identified by Tillamook County as an exceptional aesthetic resource, as have the nearby landmarks Pyramid Rock, Pillar Rock, portions of both Cape Meares State Scenic Viewpoint, Cape Lookout State Park, and Three Arch Rocks National Wildlife Refuge.



Above: Netarts Yesterday, Courtesy Tillamook County Pioneer Museum
Inset: Commercial Boat Building, Courtesy the Mock Family
Below: Netarts Today, Courtesy TEP

NON-MOTORIZED ETIQUETTE

Safety is a Top Priority

Proper planning and preparation will ensure your paddling experience is a positive one. Being knowledgeable about local weather, tides, and currents will assist in making good boating decisions. Conditions can change rapidly. Check the current conditions before you hit the water and include them in your trip planning. All the maps and guidebooks, including this one, should be used for reference only and no guarantee is made as to the accuracy, reliability, or completeness of the information they contain. Nothing can substitute for personal experience.

There are many in-water hazards to consider; educate yourself about what these hazards are and learn their locations. Understand that new obstacles can arise at any time, such as log 'strainers'—downed trees in the water that can be life threatening. Wearing a life jacket is critical. Anticipate the chance of getting wet, and dress accordingly. The water in Tillamook County is very cold, even in summer months. As the tide goes out, the water in the rivers and bays moves rapidly, so plan to paddle during incoming and slack tides. If you are new to non-motorized boating, take classes to improve your skills and knowledge. It is important to always paddle with a companion and to not overestimate your skill level.

Sharing the Waterways

Shared boat ramps are solely for launching and landing purposes. Please prepare your boat or paddle board, and make gear adjustments as well as trip preparations off the boat ramp and/or dock, in order to spend as little time as possible in the launch/land area. Along your water trail travels you may come across people enjoying pursuits such as boating, clamming, crabbing, and waterfowl hunting in and around Netarts Bay—know the seasons and give ample room for these activities. Scuba divers often display this flag on the water's surface while diving below. Pass all of these individuals, as well as any wildlife, as far to the right or left as possible and with caution.



Common courtesy goes a long way on the water.



While enjoying the water trail, be aware of your direct impact on the surrounding area. Your efforts will make a difference both for the environment and other waterway users. When observing wildlife, allow adequate space so they are not disturbed. Do not remove rocks, plants, or other natural objects, as these create habitat for the multitude of species living along these shores.

Public access is a privilege to us all. Be considerate to private landowners; if you are unsure whether the land is private or public, please stay off. For more information, see *Who Owns the Waterways*, Oregon Department of State Lands. www.oregon.gov/dsl

Public access is indicated on the maps within this guidebook. In the field, proper access is denoted by a Tillamook County Water Trail sign.

When exploring the outdoors, some key concepts will help keep the environment clean and beautiful:

- Be prepared; educate yourself
- Pack it in, pack it out
- Use public access
- Camp on hard surfaces
- Dispose of human wastes properly
- Respect wildlife and private property
- Leave it how you find it, or better

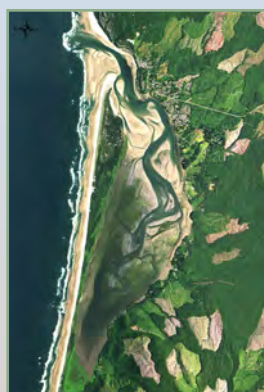
Do not disturb stranded or wounded animals. Instead, contact the Wildlife Center of the North Coast at (503) 338-0331.

Above: Riparian Art—TEP's annual third grade 'Down by the Riverside' education event.



PREPARING FOR YOUR TRIP

Because of its small size and proximity to the ocean, Netarts Bay can be affected by the ocean swell, tide exchanges, barometric pressure, and wind. Sometimes these conditions are obvious, other times they are not and can change quickly, creating dramatic differences for paddlers, especially at the mouth of the bay. Mornings and incoming tides typically provide good paddling conditions before the noon winds rise. An outgoing tide can continue well past the time marked in a tide table. It is important to check these conditions prior to your trip, paying close attention to any changes well past your planned finish time, as it is wise to know what may be coming. See 'Resources' page for info.



Netarts Bay at low tide



- Wear your life jacket.
- Carry proper safety equipment.
- Preparation, knowledge, and skill building is critical to safe paddling.
- Paddle with a companion.
- Scout for on-the-water hazards.
- Never grab a stationary object while moving on swift water.
- Stay clear of a motorboat's path.
- Position your boat perpendicular to an approaching wake.
- Dress adequately for the water temperature; understand hypothermia.

Items to bring on your trip:

- Life jacket (required)
- Whistle (required)
- Helmet
- Extra paddle
- Non-cotton clothes
- Paddle float
- First aid kit
- This guidebook/Compass/GPS
- Dry bags
- Throw rope/Tow rope/Knife
- Bilge pump
- Drinking water/Food
- Sunscreen/Bug juice
- Flares/Flashlights
- VHF Radio - Emergency Channel 16
- Cell phone w/emergency numbers (coverage can be unreliable)
- Oregon Aquatic Invasive Species (AIS) permit
- Cash for occasional parking fee
- Check webcam: janescottvideoproductions.com

Help Stop the Spread of Aquatic Invasives

Aquatic invasive species are a serious threat to Oregon's waterways. Introduction and spread of harmful non-native species can upset the delicate balance of our fragile ecosystems. Aquatic invasive species are often spread between waterways by hitching a ride on boats and gear.

CLEAN your boat/paddle board and gear thoroughly before transferring to a new water body.

DRAIN, remove, and empty all compartments of your boat/paddle board. Rinse well including areas that may trap mud and debris.

DRY your boat/paddle board and gear.

More info: www.oregon.gov/OSMB

REPORT INVASIVES: If you think you have found an invasive species, call the hotline: 1-866-INVADER



Aquatic Invasive Species Prevention Permits are required on all crafts 10' or longer. More info: www.boatoregon.com/OSMB/

Purchase online or at Tillamook Oregon Dept. of Fish & Wildlife (ODFW) office:
4907 Third Street, Tillamook, OR 97141
Any ODFW license dealer



Green Crab, *Carcinus maenas* is an invasive species that has been spotted in Netarts Bay.



U.S. Geological Survey

These tiny New Zealand mudsnails can easily transport themselves on boots, boats, and gear, and have been found in Tillamook County.



Mary Jo Adams/WSU

Japanese eelgrass, *Zostera japonica*, (also known as dwarf and narrow-bladed eelgrass) is found in Netarts Bay intermixed with the native eelgrass, *Zostera marina*. Japanese eelgrass is not currently considered an invasive species in Oregon due to the limited information on its environmental and economic impact in the estuary.

NETARTS BAY

Once known as "Oyster Bay", Netarts Bay is still associated with oysters and other estuarine inhabitants including bald eagles and great blue herons, and in the winter time, loons, puddle ducks, brown pelicans, and black brants. People come from all around to seek out the flavorful dungeness crab and the broad assortment of bay clams including cockles, gapers, little necks, butters, and soft-shells.

A paddle around Netarts Bay offers more than meets the eye. The clarity of the water allows viewing of the underwater life from the dry seat of your craft. Seals are often perched beach side in several locations inside the bay and, off in the distance, beyond Three Arch Rocks National Wildlife Refuge, the sunsets can be stellar. A paddle up the bay (on a high tide only) will take you past wetlands near the Netarts Spit, where the birding can be spectacular, nearly year-round.



Did you know bay clams...

- Keep algae populations under control.
- Help estuaries stay clean by filtering water (in some species a single clam can filter up to 50 gals/day).
- Pull carbon dioxide out of the water and incorporate it into their shells as they grow.



Locals - Netarts Bay

Legend

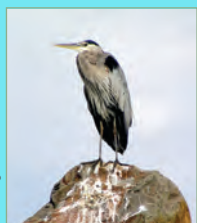
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|--|---------------------|--|------------------------------|--|---------------------|
| | Public Parks | | Public Access - Flatwater | | Wetlands |
| | Local Gov't. | | Private Land - Do not access | | Mud Flats |
| | Common Kayak Access | | Wildlife Viewing | | Lodging |
| | Camping | | Restroom | | Motorized Boat Ramp |
| | Picnic Area | | Drinking Water | | Food |

This guidebook cannot alert you to every hazard or anticipate the reader's abilities. The content within these maps is in no way a guarantee that any area is safe or unsafe. People using this guidebook must understand their own limitations, paddle within their abilities, and assume full responsibility for their own safety.

CAUTION: Netarts Bay is very exposed. Paddling near the mouth can be unpredictable. Be mindful of outgoing tides, currents, winds, and ocean conditions. These conditions change quickly which can have a dramatic effect for paddlers. Garibaldi Coast Guard ocean observations: (503)322-3234 Emergencies: 9-1-1 VHF Radio: Emergency (only) Channel 16

Crabbing and gathering of bay clams in Netarts Bay are favorite pastimes. It is important to have your shellfish license (from Oregon Dept. of Fish & Wildlife, below) and study regulations that apply. Harvest with sustainability in mind. Always fill in your hole when finished, never take more than allowed (broken clams count as part of your catch), stay off native eel grass beds, and dig your own clams. Our natural resources are a privilege we want to nurture in order to share with future generations. www.odfw.com Shellfish Safety Hotline: 800-448-2474

Great blue herons—Year round
Black brants—Dec.—April



Great blue heron



Happy Camp provides parking and easy beach access. Caution, as this is extremely close to the open ocean.

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Netarts Landing County Boat Launch—County parking day use fee. Launch is busy with motorboats; stage boats off ramp/dock. Located on Netarts Bay off Hwy 131.

Loons, grebes, and sea ducks—Nov.—March

Netarts Bay offers suitable conditions for creating habitat for sand dollars. These are live animals. Please use caution so as not to disturb.

Bald Eagles—Year round

All oyster beds are commercially owned or part of the Shellfish Preserve in Netarts Bay - please do not disturb. Oysters are illegal to collect without a commercial license in Oregon.

Puddle ducks—Nov.—March

The Netarts Shellfish Preserve is home to The Nature Conservancy's initiative to reintroduce the Olympia oyster. This native oyster restoration project is now seeing successful natural propagation. Oysters provide a suite of ecological services to estuaries: filtering algae from the water, providing refuge for juvenile fish, and helping to stabilize the shoreline.

NETARTS INDUSTRY, ECONOMICS & SCIENCE

Contributed by Rose Rimler, Oregon Sea Grant/Natural Resources Policy Fellow and Christine Smith, Whiskey Creek Shellfish Hatchery/Oregon Sea Grant/Friends of Netarts Bay WEBS

A Tale of Two Oysters: Shell mound evidence indicates that Olympia oysters were harvested from Netarts Bay by native peoples for many years. Later settlers also enjoyed these delicacies and began commercially harvesting oysters in the 1860's. Today, Netarts is still associated with oyster production but these operations mainly depend on the Pacific oyster, a fast-growing Japanese variety. Although the Olympia oyster is native here and to the West Coast in general, it is now only found in small remnant populations in estuaries from California to British Columbia.

What happened? The high demand for this small, slow-growing oyster proved to be unsustainable, and the industry collapsed. The last commercial landings of Olympia oysters from Netarts Bay were reported in 1957. Today, the few remaining Olympia oysters in Oregon estuaries are protected from even recreational harvest. In recent years, Olympia oyster restoration has become a hot topic for estuary scientists. The Nature Conservancy has spearheaded the effort here to plant oyster "spat" (very young oysters settled onto shell), produced locally at Whiskey Creek Shellfish Hatchery, into the upper portion of the Netarts Bay. Many of these spat survived to become adults, and recent monitoring efforts have indicated that they are reproducing successfully.

What is a shellfish hatchery and how does it work?

Oyster farmers responded to the collapse of the Olympia oyster by importing Pacific oyster seed from Japan. Since the 1970's, hatcheries like Whiskey Creek produce the majority of oyster seed farmed in the Pacific Northwest. Each year the hatchery produces billions of oyster, mussel, and clam larvae which they sell to farmers throughout the region. At the hatchery, adult shellfish are "conditioned" to be ready to reproduce and spawned to produce larvae. After 2-3 weeks swimming in large hatchery tanks, oyster larvae are ready to settle out and are sold to west coast oyster farms. Farmers then 'set' the oysters on shell and plant them on leased plots in coastal estuaries. After 2-4 years, the shellfish are large enough to be harvested for sale.



How is the industry surviving a changing ocean?

Natural variability in water quality has always affected production in shellfish hatcheries. However, in the mid-2000's, Whiskey Creek Shellfish Hatchery began to experience steep, and persistent, declines in production. By summer 2008, the hatchery began to understand that larval mortality

was linked to low pH water upwelled along the Oregon coast. Ocean acidification increases the acidity of this water as carbon dioxide from the atmosphere forms a weak acid when it is absorbed by the ocean. The reduced pH of the water limits the availability of shell building material, making it hard for shellfish larvae to build their shells. Once the hatchery discovered this connection, they were able to treat the incoming seawater and dramatically restore production levels. The hatchery has built strong partnerships between researchers and governmental agencies to address this problem and set up a network of monitoring sites to inform growers of water quality in coastal bays. Although predictions for the future suggest the water quality will continue to deteriorate in the coming decades, the industry is armed with knowledge and strategies to remain productive in the face of changing ocean conditions.

Above: The science of growing oysters means feeding them homegrown algae

Middle: Commercial oyster harvest, courtesy Don Frank Photography provided by Nevör Shellfish Farm

Bottom: Creating habitat for larval oysters. Adult shells make great habitat for larval oysters to settle, courtesy The Nature Conservancy



Restoration to the Rescue

The Netarts Bay watershed is home to several fish species common to the North Coast. Coho and chum salmon, cutthroat trout, steelhead, and lamprey are the primary inhabitants of the bay's tributaries. Due to the watershed's relative size, populations are historically smaller here when compared to larger basins. However, these fish face many of the same challenges that limit productive capacity in other areas (habitat alteration, fish passage barriers, water withdrawal, predation, etc.), thus these populations are likely present at reduced levels today. Unlike other North Coast basins, no hatchery fish are currently released into the Netarts watershed.

Jackson Creek, a small, direct-to-ocean tributary in Cape Lookout State Park was adversely affected by a 1950 project that diverted flows from its historical, ocean-going channel into Netarts Bay. In addition, a concrete-reinforced ford crossing in the ocean-going channel hindered fish passage. In 2013, a restoration project was undertaken to rectify these issues. Historical banks were restored, the floodplain was reconnected and full flow returned to the ocean-going channel. The channel in this area was re-constructed to provide fish passage, improve in-stream conditions, and a new all-purpose timber bridge was installed—a victory for both fish and people.



Paying Attention to Coastal Erosion

Contributed by Jim Young and the Friends of Netarts Bay: Watershed, Estuary, Beach, & Sea (WEBS) www.netartsbaytoday.org and Jonathan Allen (DOGAMI)

In 1998, people across the country watched as homes on the edge of a dune just north of Netarts Bay were threatening to topple into the ocean as waves ate away the toe of the dune. Fortunately no homes fell, but it brought attention to the very dynamic nature of the Oregon coast and how the bays influence our shoreline. The mouth of Netarts Bay had shifted to the north increasing erosion along the beach. To understand how this happens, we first need to understand more about Netarts Bay and coastal processes in general.

The geology of the Netarts coastline is characterized by basaltic headlands in the south (Cape Lookout) and north (Cape Meares) and Netarts Spit which is comprised of fine beach sand and some basalt cobble. The presence of the spit protects the estuary from the open coast. The entire configuration forms a pocket beach littoral cell that spans from headland to headland. Netarts Spit is free-moving in that there are no jetties to restrict its movement over time. In fact, geologists are watching the spit as the neck of Netarts Spit is narrowing and may at some time breach, which will change the whole character of the bay.

Though erosion can happen any time of year, it is more extreme during winter for a multitude of reasons. Winter brings storms with high surf and large, steep waves that move sand from beaches. Normally this sand deposits and forms protective berms on the beaches, but the large winter waves move the sand out to bars just beyond the breakers, leaving shoreline cliffs exposed to the eroding action of the pounding water. Erosion intensifies during storm surges at high tides due to even larger wave action. Add El Niño, the periodic warming of waters in the tropical Pacific, and increasing wave height trends into the mix and the possibility of stronger winter storms and exacerbated shore erosion are likely. These and other factors result in both gradual, long-term erosion and episodic events that are sometimes catastrophic. Why does all of this matter? The coast is a beautiful and dynamic system and paying attention to the tides, the weather, and the always changing conditions, particularly around the mouth of the spit, is critical to a safe and fun recreation experience.

*Above: Jackson Creek Restoration, courtesy the Tillamook Estuaries Partnership (TEP)
Middle: Coastal Erosion, courtesy Ella Hicks, Tillamook County Pioneer Museum
Bottom: Cape Lookout Slide, courtesy Jim Young*



RESOURCES

Weather & Conditions

Netarts, OR Weather: weather.com
Live Netarts Cam: janescottvideoproductions.com
Oregon Rivers: waterdata.usgs.gov/or/nwis/rt
Tide Predictions: protides.com
Tide tables available at local markets.
NOAA: www.wrh.noaa.gov/pqr/
Buoys: www.wrh.noaa.gov/pqr/buoys.php
Surf Report: www.oregonsurfcheck.com
Garibaldi, OR Coast Guard Observations: (503)322-3234
Depoe Bay, OR Coast Guard Observations: (541)765-2122
Road Report: tripcheck.com

East Elementary - Life Cycle of a Salmon



Safety Information

Netarts-Oceanside Rural Fire Protection Dist.: (503)842-5900
American Canoe Association: americancanoe.org
Oregon State Marine Board Equipment and Safety Information: www.oregon.gov/OSMB
US Coast Guard Navigation Center - Local Notice to Mariners: navcen.uscg.gov

Instruction/Tours

Retail/Rentals

Kayak Tillamook, LLC: kayaktillamook.com
Nestucca Adventures: (503)965-0060
Kiwanda Surf Co.: (503)965-2000
Moment Surf Co.: (503)483-1025
Wheeler Marina Rentals: (503)368-5780
Wheeler on the Bay Lodge: (503)368-5858

Peter Kurre



Clubs/Groups

Friends of Netarts Bay (WEBS): netartsbaytoday.org
Tillamook County Water Trail: tbnep.org
Bend Paddle Trail Alliance: bendpaddletrailalliance.org
Lower Columbia Canoe Club: l-ccc.org
Oregon Kayak & Canoe Club: okcc.org
Oregon Ocean Paddling Society: oopskayak.org

Transportation

Tillamook County Transportation District: tillamookbus.com

Chambers

Manzanita-Nehalem-Wheeler: (877)368-5100
Pacific City-Nestucca Valley: (503)392-4340
Rockaway Beach: (503)355-8108
Tillamook: (503)842-7525

Logan



Camping

Bureau of Land Management: www.blm.gov/or/resources/recreation
Oregon State Parks and Recreation: www.oregon.gov/OPRD/PARKS/
Tillamook County Parks Dept.: (503)322-3522
www.co.tillamook.or.us/gov/parks
Tillamook State Forest: www.oregon.gov/ODF/pages/state_forests/recreation.aspx
US Forest Service: www.fs.usda.gov/recarea/siuslaw/recreation

Paddling Permits/Fees

Aquatic Invasive Species: www.odfw.com
Oregon State Parks Day Use Fees: www.oregon.gov/OPRD/PARKS/dayuse_permit.shtml
Tillamook County Boat Launch Fees: www.co.tillamook.or.us/gov/Parks/BoatLaunchFees.htm

Other

Wildlife Center of the North Coast: (503)338-0331 www.coastwildlife.org (If you encounter injured wildlife)





An Open Letter...to Myself

Living on the Oregon Coast means living with contradictions. It's sunsets and slugs and sand in your bed and whales spouting just out of reach. It's eagles soaring overhead and moles digging underfoot, challenging Job's own patience and a gardener's ingenuity. It's rain and wind and where did I put those candles? And families snuggled under grandma's quilt telling ghost stories in the dark as PUD crews struggle through the night. It's salmon and steelhead leaping in tidewater and the floods that carved their homes and destroyed ours. It's fungus between your toes and gourmet meals of mushrooms from the forest and raccoons in your garbage can. One day Nature can knock us for a loop and the next day rock us gently to sleep. Most of all, living here means that young or old, rich or poor we must come to terms/acknowledge/bow our heads in acceptance of what is, because our puny efforts to outwit Nature are nothing more than futile, misplaced pride.

The Oregon Coast is the finest example of haiku I've found, a poem of swirling fog, restless ocean and warm spring evenings when the earth feels alive beneath your feet. I've stood in Pharaoh's footsteps, I've waited for the monsoon in India and I've sailed the seven seas, seven times over, yet I've returned and will always return here, where I was born and where I will die. And while I wait for that day, I pray I will never turn my back on a neighbor, forget my friends or deny Nature's thrall. I will learn and I will teach and I will always thrill to the sound of geese flying high overhead on a dark, stormy night, and I will learn more, but never enough, never enough.

That, for me, is my life of contradictions, wrapped up in a package of place I fear and love and accept.

Jim Mundell (1950-2006)

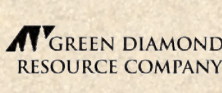
Thank you to our sponsors for their generous contributions of technical assistance and/or monies to the Tillamook County Water Trail.



Here for Oregon. Here for Good.



Rivers & Trails Program

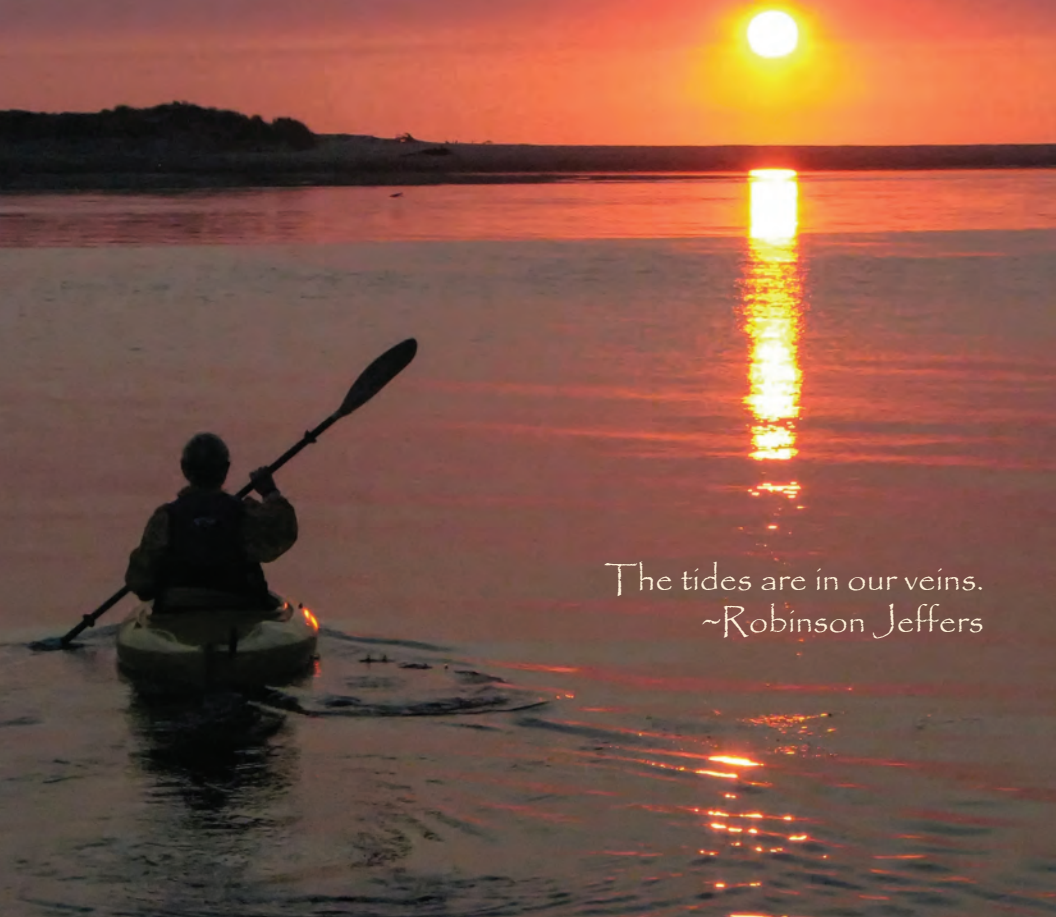


A special thank you to Jim "Salty Dog" Mundell for his inspiration and to the Salty Dog Foundation for their support.

Jim spent his entire life in Netarts and, no matter where he went, he held local rivers, bays, and the Pacific Ocean in his heart. His hope was that by connecting people to the water it would arouse support and encourage stewardship for this very special place.



The Tillamook County Water Trail is a community supported effort. Guidebooks and maps for the trail encompass estuaries and watersheds throughout Tillamook County. Donations to keep this project flowing are always appreciated. For information about additional maps in this series or to make a donation, contact the Tillamook Estuaries Partnership at (503) 322-2222.



*The tides are in our veins.
~Robinson Jeffers*