

HMSC Nature Trail Quest

Established: July 2012 by Oregon Coast Quests

Box Monitor: HMSC Visitor Center

This Quest covers about 1/2 mile on a paved pathway, and takes approximately 45 minutes to complete. Dogs are not permitted on the estuary nature trail. Bring binoculars for birdwatching, and boots if you want to explore the mud flats.

The trailhead for the HMSC Estuary Nature Trail is located between the Oregon Coast Aquarium and the Hatfield Marine Science Center (HMSC) complex. To get there from Newport, drive south on Hwy 101, cross the Yaquina Bay Bridge, get off at the first exit after the bridge, and follow signs to the Oregon Coast Aquarium. Park in or near the Oregon Coast Aquarium's SEA LION LOT, located at the northernmost end of the facility. Walk away from the aquarium entrance and follow the NATURE TRAIL sign, which will take you east on a short, paved, access road. Begin your Quest at the HMSC back entrance gate.

Let's begin!

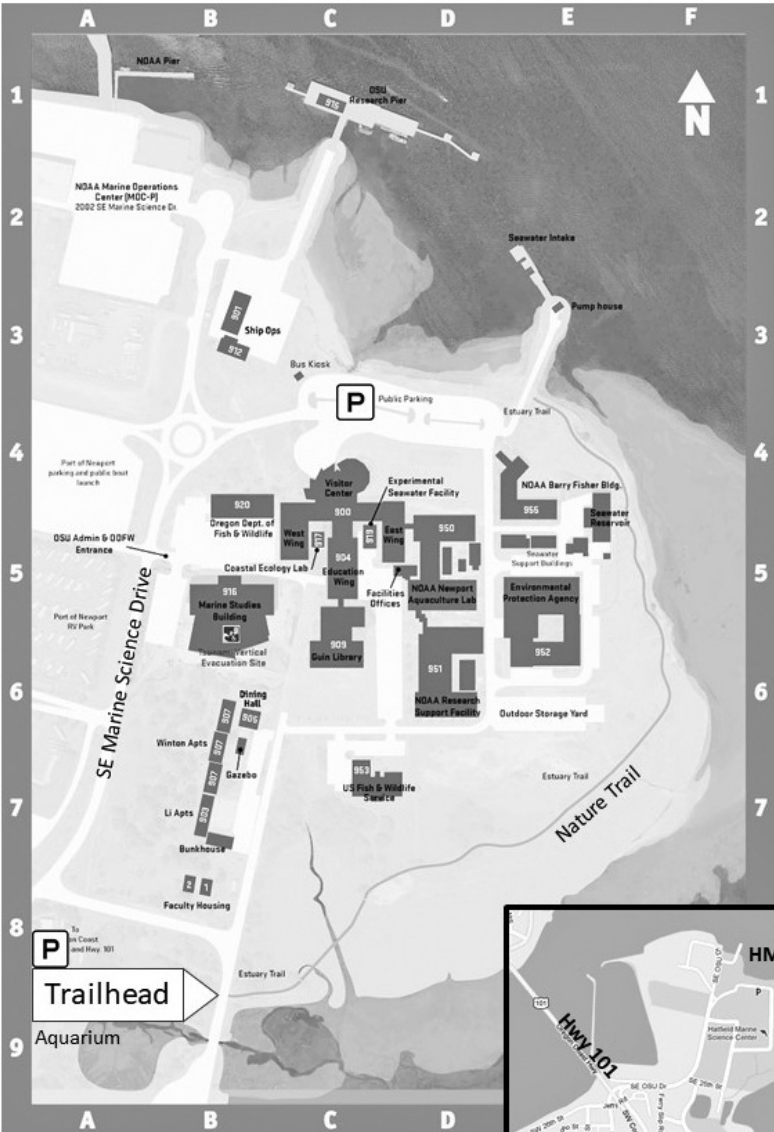
In this place of constant change
Between the river and the sea,
Freshwater and saltwater meet
In the Yaquina ESTUARY.

To the west, in the distance,
The Yaquina Bridge shows
The location of the sea
From which saltwater flows.

From the east, past the marsh
The Yaquina River runs,
Bringing freshwater runoff
From inland mountains.

To begin, find the trail
Near a colorful sign (not white).
At the bottom of the post,
A clue hides out of sight.

Use this map to help you solve the Quest. Follow the directions and collect the letter clues to fill the numbered squares on the last page of this Quest. The message you complete will help you find the hidden Quest box.



Quest Partners

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Write the letter that you find
In the square number 1.
Now continue your Quest
And let's have some fun!

Check out the small cove
Right next to the trailhead.
Is it filled with water now?
Or is it drained instead?

The semidiurnal tides
Of the mighty Pacific
Means water ebbs and flows
On a schedule quite specific.

Walk quietly down the path
Toward a pole as tall as a tree.
Sometimes ospreys nest on top.
What other birds do you see?

You may see great blue herons,
Great egrets, gulls, or ducks.
Many species migrate,
So their numbers are in flux.



QUESTION for the Curious

*Is the tide coming in or going
out right now?
How can you tell?*

*The answer to this and other
questions are in the Quest Box
at the end of your journey!*

On the wooden bridge,
Tree swallows may be
Peeking out from nest boxes.
How many do you see?
Is there life down there
In the muddy, narrow trench?
What sounds can you hear
When you stop near the bench?

Check under the bench
For your next hidden clue.
Write the letter you find
In square number 2.

This is the salt marsh.
Note the plants living below.
These are halophytes, which
Means "salt-plant," you know.

Jaumea, pickleweed,
Saltgrass, owl's clover...
These plants do just fine
When the tide washes over.

At the end of the bridge
Stands an evergreen tree.
It's a Sitka _____;
Its first letter is clue 3.



This tree stands in the upland
So it skips a salty soak.
“Shake hands” to feel its needles. But
carefully—they poke!

Did You Know?

The Oregon coast experiences semidiurnal tides, which means we have two high tides and two low tides each day. The sea level rises over several hours (flood tide) until it reaches high tide, and then falls over several hours (ebb tide) until it reaches the low tide.

Unlike the plants of the marsh,
The plants here in the upland
Don't need to be halophytic—
Though they still must tolerate sand.

Ahead the trail divides,
But stay straight, careful readers.
Going left would lead to
HMSC buildings and bird feeders.

But before proceeding on,
Check the two pine trees.
Clue 4 is hiding low
Near the trunk of one of these.

Go forth, find a sign with terms
Like “benthic” and “anadromous.”
Does the second letter on the sign
Fit space 5? Yes, it does!

Some species spend just
Part of their lives here.
But without this estuary
Their future would be unclear.

Lots of food, shallow water,
Plenty of hiding places...
Estuaries serve as “nurseries”;
We must protect these spaces.

At the next sign,
You get a better view.
Eyes closed, take a breath.
What's the air smell like to you?

Check the sign. Clue six
Of your mystery word
Is the second letter in the name
Of the crab-holding bird.

Are there birds outside today?
Are they flying? Are they still?
Do you see any birds
Holding food in their bill?

Birdwatching, crabbing, fishing...
This is a place for recreation.
Many people live here;
Others come on vacation.

Who makes a living
Here in the bay?
Try your hand at "I Spy."
What can you find today?

After the brown wooden shelter,
The paving may come to an end.
Erosion reclaiming the path
Requires making amends.
A dynamic revetment
Has been placed along the shore
In an attempt to stop the sea
From taking any more.

Check off all that you can see

- Channel marker
(red triangle)*
- Liquid natural gas tank*
- Sailboat*
- Residential homes*
- Power boat*
- Oregon Coast Aquarium*
- Weather instruments*
- Someone fishing*

The smooth river rocks
And snags chained in place
Were brought here on purpose
To transform the space.

QUESTION for the Curious
What is a dynamic revetment?

Turn around, go back to the shelter,
Where a sign waits for you.
The seventh letter of its title
Is your 7th clue.

Though you now have all the letters,
They look a little strange.
To find out where to look next,
They must be rearranged:
3 – 6 – 5 – 2 – 7 – 1 – 4

The resulting word tells you
Where the Quest Box hides!
Search low under a circle
Near its outsides.

Explore the box's contents.
Put it back when you're done.
Then explore the marsh and mud
And continue to have fun.



Fill in the boxes with the answers to the clues to solve the Quest.

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
1	2	3	4	5	6	7

When you've found the Quest Box, sign your name and stamp the back of your book to mark your accomplishment. Don't forget to seal the box tightly and return it to its hiding place for the next person to find!