#### Tour of our oyster farm, Oyster Bluff Shellfish



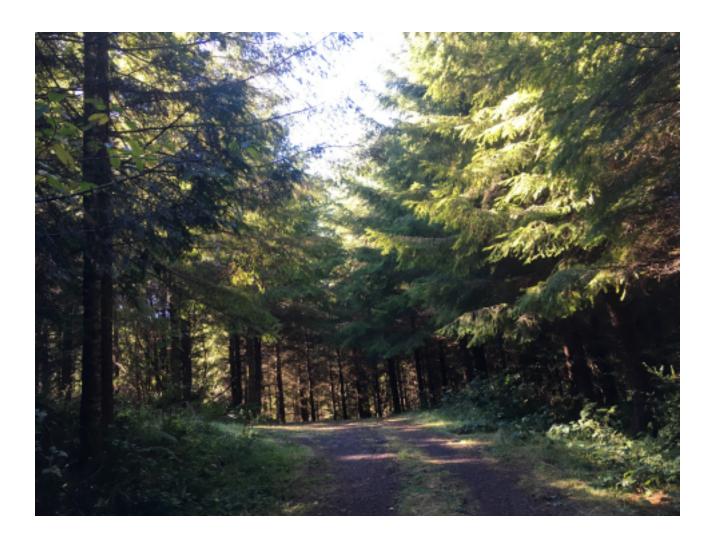
We would like to show you our oyster farm where we grow oysters in tideland adjacent to our forest land near Newport, Oregon. Brian, the biologist with expertise with oysters, is center. His wife Elise is at the right. His father Mark is at the left. (Photo in 2015)

### View on drive to our oyster farm

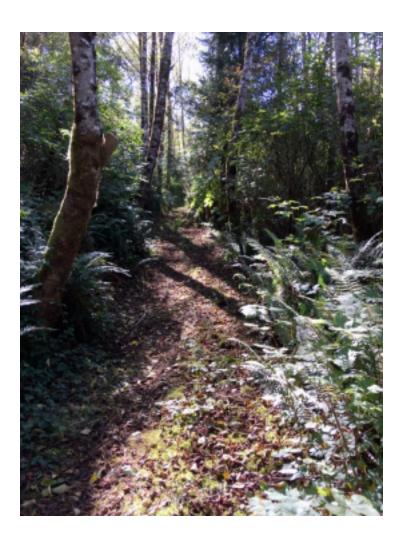


We can use a one-lane private forest road. This view is from the south end of Kings Slough, our growing area.

# Our parking area in the forest



## Footpath through the forest to our work area





In 2016 we built a shed in our work area in the forest next to the dock. We carried all the materials on the footpath.

#### Welcome to our dock





The floats supporting an old wooden dock started to deteriorate, so we replaced the deck and ramps with state-of-the art deck and ramps made from marine grade aluminum. We obtained Army Corps of Engineers approval, and the major renovation was completed in 2017.

This is our location on Kings Slough at high tide.



These are baby oysters that Brian and Elise brought to the old dock in 2014. Brian had spawned them when he worked at the Hatfield Marine Science Center in Newport. When spawned, oysters start as larvae. Pieces of shell are ground into tiny pieces, like fine sand, and put in tanks holding the larvae in salt water with algae for food. One larva attaches to one tiny piece of shell, and that is the start of the oyster "seed." These oysters are about ½ inch.





Recently, we have purchased oyster seed from a hatchery and then grown them at our location. In this photo, each bag has about 5 thousand baby oysters, each about ¾ inch. Brian hanging a stack of cages with oyster seed from a raft at our dock in late 2020. There is almost continual water flow in the channel past the dock so there is plenty of algae and the baby oysters grow rapidly.

This photo of our growing location, with our dock and a line of mesh bags holding oysters, was taken at an intermediate tide level. At the lowest tide levels, there is water in a channel but you see high mud flats in the rest of Kings Slough. The water doesn't start to cover the mud flats near the dock until it gets to a 3-foot tide level or a little higher. At our location, the water doesn't get close to shore until the tide level is about 5 1/2 feet.



When the oyster seed grows larger, but not yet large enough to sell as petites, we transfer them to larger mesh bags with a larger mesh size. The bags are called grow-out bags. Different oyster farms use different growing systems. We use tipping bags. Mesh bags are hung from lines with floats attached. At lower tide levels, the bags hang down from the lines but are still higher than the water level. When the tide comes in, the bags will float up to be on the surface of the water at higher tide levels.

Brian likes the tipping bag system. The oysters are under water part of the day and above water part of the day. When under water, the oysters can feed on algae. When above water, the oysters have to clamp shut tightly and wait for the next high tide. The oysters have to work harder, and they grow more slowly, than if they were under water all the time. But, they also grow tougher shells and stronger muscles. Oysters grown this way are easier to shuck, so they are good for the "half shell" market (restaurants and oyster bars).

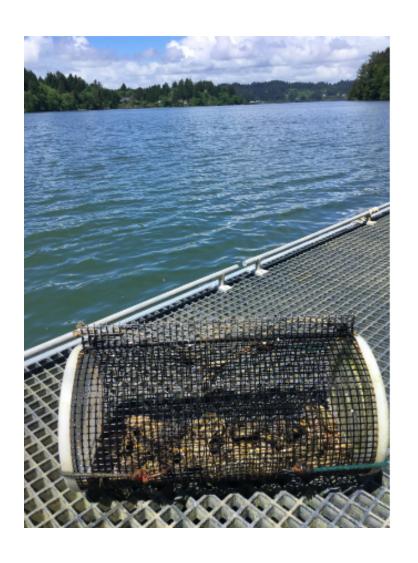


To do our work, we have to keep track of the tide cycles at our location. Every 25 hours, there are two low tides (one lower than the other one) and two high tides (one higher than the other one). The low tide levels and high tide levels change on a daily basis throughout the year. When deciding when and what work we can do, we need to find times with an appropriate tide level during daylight hours, while avoiding drenching rain and high wind.





At high tide, the mesh bags on the lines are floating on the surface of the water. It is a beautiful sight to see the oysters feasting on the continuous, gourmet supply of algae and other plankton in our nutrient-rich waters.



Just before selling oysters, Brian goes out on the mud flats and brings mesh bags filled with market-size oysters to the dock. We put them in tubes and hang the tubes in the water channel so they will be under water almost all the time.

We like to pull up the tubes to harvest oysters on the incoming tide, just before high tide, when possible. The oysters are cleanest coming out of the water at this time.

In this photo, there are only about 6 dozen oysters in the tube.

After selecting oysters at the dock for harvest, we bring them on the footpath up the hill to our parking area in the forest. We also bring barrels of salt water from the dock. This is "approved" water for growing oysters. (Approval at our growing location is based on



favorable water quality test result of water samples we submit to a government lab.)

We bring the oysters and approved water to a workshop where we wash the oysters. Then we put the oysters in containers with approved salt water for an hour or longer so they can "purge out" any remaining sediment. This produces very clean oysters that are refrigerated until ready to deliver.

Pictured 15 dozen petites are ready for delivery

When we don't have deadlines, there's the allure of the forest and estuary. Sometimes you just want to sit on the dock and watch our world.

