

# In a box: Company develops new approach to hatcheries

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Highway 30 west of Clatskanie. He was named Hatchery Manager of the Year in 2006 for his innovations and outreach to the local community.

Jones has 25 years of fisheries experience in Southeast Alaska and moved to Astoria to manage Clatsop County's Select Areas Fisheries Project.

"We both were tied to the spring Chinook fishery," Warren said. "I provided smolt to him."

One of their first projects together was to improve the hatchery at Warrenton High School in 2009. They worked with Henry Balensifer, who'd

recently graduated from the school and had founded the nonprofit Warrenton High Fisheries.

Together they replumbed the hatchery with a gravity system utilizing rain from the roof of the gym and hatchery building, making it the first rain-powered hatchery on the west coast, Jones said.

The smolt survival rate rose from 10 to 90 percent.

"The mayor of Warrenton was our first and only employee," Warren joked.

The men developed other innovations.

Warren was shopping at Bed, Bath and Beyond when he became intrigued by a fog machine that used untrason-



Tod Jones and Roger Warren of Redd Zone.

ic sound waves. He found one at Goodwill, took it apart and came up with a process of preserving fish eggs using a dense cold fog.

Jones, who'd been frustrated by the amount of time employees spent cleaning nets, developed a high-efficiency cleaning system he calls a water spike.

Both had worked with the Skokomish Tribe on Hood Canal and, when new hatchery manager Robert Blankenship turned to the men for help in renovating the tribe's 50-year-old hatchery, it was the spark for Instant Hatchery.

The tribe's Enatai Creek

Hatchery was designed to incubate 3.5 million fall chum eggs and they wanted to increase it to 5 million to participate in Washington state's Orca Task Force program benefitting resident killer whales through hatchery-raised chum salmon. Space was a big concern.

Redd Zone's Instant Hatchery was customized to the

## Vote: Essay winners always will

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lunch – and used it as an example for how democracy works.

"One person's decision to neglect voting would work to the detriment of the entire group, including himself," he wrote.

***"I liked the personal approach I received from Ocean View and I'm relieved to think everything will be in order when the time comes."***

—from Sherryan Reische



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tribe's needs and will be delivered next week. A large crane will set it in place beside the tribe's existing structure.

The hatchery in a box will give the tribe the ability to produce 5.4 million eggs, beginning with the 2020 fall chum season.

An Instant Hatchery is \$100,000 to \$160,000 and can be built in a container just 10 feet long or up to 53 feet. The cost is far less than construction of a new building with all the fishy bells and whistles. Plus, a complete system can be available to customers within weeks.

There are doors at both ends, a diamond-plate floor, overhead water lines, effluent plumbing, and 36 incubator racks. The "Best Fry" and "Swim-Out" incubators allow the fish to be handled less, greatly reducing labor and increasing survivability.

"Ninety-nine percent of hatcheries are big concrete monuments," Warren said. "This is the first of its kind."

"If I do not vote, I am surrendering my basic right as an American citizen to influence how my government treats its people. ... When I do not vote, I surrender responsibility for America's future to others. I am flippantly, disrespectfully neglecting to acknowledge my own ability to do what I believe is right."

Forrest Cooley wrote about tyranny and how it could rise again.

"I will vote because it is the best way to keep America free," he wrote. "I could choose to believe that my vote is insignificant, but that would mean taking for granted the fact that there are billions of people around the world who are unable to fully participate in their government."

The winning essays are posted at [www.incoregon.org](http://www.incoregon.org).

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