

An oyster can label, circa, 1895, illustrates the practice of oyster tonging. Oystermen on Shoalwater and San Francisco bays used these hinged tools — something like giant salad tongs — to pick oysters off the bottom while the tide was in.

# SHELLFISH WARS

## Lobsters, Shoalies, Olympias, Atlantics and Pacifics vie for supremacy

If you've ever idly wondered why lobsters are such a big deal in New England and Maritime Canada but haven't gained a claw-hold at our similar latitude in the Pacific, you're not unique — the question has come up since at least the 1880s.

Among many instances of European-Americans endeavoring to reconfigure the West Coast's animals, plants and landforms to our liking, efforts to establish lobsters here have to be counted as a failure ... so far.

In 1888 two shipments totaling 565 adult lobsters and 104,000 fry were planted off the Pacific coast between Monterey Bay and the Strait of Juan de Fuca.

"What the result of this will be can be conjectured, but cannot be definitely determined until after the lapse of sufficient time to give



Matt Winters

the lobsters an opportunity to grow and multiply," J.W. Collins told Congress in his landmark "Report on the Fisheries of the Pacific Coast of the United States.'

Already naturally providing such a deli cious bounty of seafood options, the natural spirits of the north Pacific must have concluded this attempt was human

hubris of the worst sort, and slapped it down. But we didn't give up.

#### **Failed lobster colonies**

ccording to the Canadian Encyclopedia, A "from 1896 to 1966 there were at least 11 separate introductions of American lobsters into British Columbia waters, and even more along the U.S. West Coast. In Canada, introductions probably totaled no more than 5,000 adults. Although American lobsters seem able to survive in the Pacific, there is no evidence that any of the introductions has resulted in a reproducing population."

Since we lack the Gulf Stream — the north-flowing tropical current that warms the ocean along the Atlantic seaboard — lobsters aren't likely to be as successful here. Their eggs and fry also face predation by Dungeness crab and other competitors.

Despite these challenges, it actually isn't unheard of to find lobsters in the Pacific Northwest. In August 2014, a surprised fisherman pulled up a heavily egg-laiden lobster just off the city of Vancouver. Speculation suggested it wasn't a descendant of early introductees, but more likely the result of a good deed.

"When you have a combination of live seafood markets and members of the public who feel that it's not fair to the animals, then you have people buying them to set them free," University of British Columbia marine biologist and professor of zoology Christopher Harley told the Vancouver Sun newspaper.

This January, a different lobster with claws the size of a man's size 11 shoes washed up on a Vancouver beach.

"Those claws are pretty huge," Harley told CBC News. "That suggests that if someone bought it in a store and released it ... then it may have been cruising around for quite a while to grow that big.'

#### Will they ever prosper?

Introduced species — even valuable ones ■ like lobsters — have all sorts of side effects,



**Damon Gudaitis Photo** 

This giant lobster washed up in Vancouver, B.C. in January. For a sense of scale, note

including preying on native wildlife and carrying harmful parasites or pathogens. Although accidental introductions happen all the time, officially sanctioned ones are rare today. (One local example of an invasive species gone wild is the sand grain-size New Zealand mud snail. First discovered in the Columbia River watershed in 1997, it has in places now reached concentrations of 200 per square inch, wrecking clam beds.)

Regarding lobsters, UBC's Harley notes, "You never know which lobster you add that becomes the important one" — the one that becomes the pilgrim of its species, stepping off Plymouth Rock and conquering everything

It becomes increasingly clear that humans lack the organizational skills and willpower to avert massive changes in our climate and oceans in the decades and centuries ahead. There will be winners and (mostly) losers. Lobsters on the West Coast could be one of

Washington state climatologist Nick Bond expects local seawater temperatures to climb to more lobster-friendly levels by around

#### **Eastern and Japanese oysters**

The Pacific Northwest's enormous shellfish industry, recently valued at \$270 million annually, also is a story of introduced species, from Pacific oysters to Manila clams.

The Gold Rush of 1849 spurred intense exploitation of the native oysters of Willapa Bay, then known as Shoalwater Bay.

"Shoalwater Bay is celebrated on the Pacific Coast for its oysters, which occur abundantly there on natural beds. For a number of year the oyster supply of San Francisco was obtained solely from this source," according to the federal fisheries report of 1888. When young Mark Twain was a San Francisco newspaper reporter extolling the virtues of oysters, it was Washington Territory oysters he was slurping.

The two principal oystermen in 19th century San Francisco, John Stillwell Morgan and Michael Molan Moraghan, each started out by bringing sailboats loaded with oysters from Shoalwater, in cooperation with local

In 1869, soon after the opening of a railroad connection with the East, large living Eastern oysters began arriving in the San Francisco market. They became more popular than Shoalwater oysters, or Shoalies, for a couple

Like lobsters, they found West Coast waters too chilly to sustain long-term natural reproduction, either in California or in Washington. However, adult Eastern oysters and young ones (called "seed") imported from the east survived long enough to reach marketable size inside both Shoalwater and San Francisco bays, at least until siltation and other issues doomed them on this coast by around 1920.

#### Shoalies make a comeback

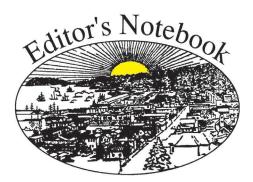
In the late 1880s, the novelty of being able Lto eat Easterns had fallen off and Shoalies made a second stand in the Bay Area.

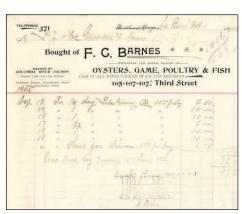
"Receipts from Atlantic coast beds have decreased and in 1888 only 48 carloads of 'seed' and 20 carloads of large oysters were imported from the East," according to the federal fisheries report. "This may perhaps be accounted for by the fact that recently quite large quantities of native oysters have been brought from the bays of the state of Washington (Where they obtain greater excellence than farther south) and planted in San Fran-

"... Many of the older citizens, having acquired a taste for the native oysters before any others were obtainable on the West Coast, prefer them to those brought from the Atlantic. This preference has created considerable trade in the native variety."

Price might also have played a role. In 1888, Atlantic oysters sold for \$3.98 a bushel in San Francisco, compared to Shoalies at \$3.37.

In the 1880s, some Shoalies were said to grow to half the size of an Atlantic oyster. This would be gargantuan by modern standards. One 20th century Washington oysterman estimated it would take 2,500 native oysters to produce a gallon of meat — they are basically the escargot of the oyster world.





**Contributed Photo** 

The early Oregon and Washington oyster firm of F.C. Barnes centered its operations in South Bend, Wash. Like many oystermen and shellfish consumers at the time, Barnes made a distinction between Shoalwater (Willapa) Bay oysters and those from the same species raised in south Puget Sound known as Olympias. Shoalwaters were larger and regarded as better tasting. This receipt is for dredging work undertaken on behalf of the P.J. McGowan & Sons salmon company, with canneries on Willapa Bay and the Columbia estuary.

Depletion of native oyster beds in Washington and a few smaller Oregon bays, along with the eventual failure of efforts to create a self-sustaining population of transplanted Eastern oysters, led to introduction of Japanese oysters in the Pacific Northwest. Renamed Pacific oysters in a marketing move, large Japanese oysters form the basis of the West Coast oyster business to this day. Though the modern preference is for relatively small oysters, Pacifics became popular with growers in part because they can grow so large — up to 40 shucked oysters to the gallon.

There are some who argue to this day that establishing Pacific oysters in the U.S. was an environmental mistake — though few oyster lovers will agree. There are scattered, but serious, efforts to reestablish native Northwest

In light of contemporary battles over how to control non-native eelgrass and an exploding population of native burrowing shrimp in Willapa, it's also interesting to note deteriorating conditions for oysters has been an issue for at least 13 decades or so.

The 1888 fisheries report notes, "The transplanting of oysters from the natural to the cultivated beds has become necessary because the bottom of the bay near the natural beds is rapidly filling up with vegetable growths, and many areas which were once profitable oyster grounds are now worthless.'

The human struggle to cope and adapt to changing habitats is an old story. This century will present many opportunities to hone those

Matt Winters is editor and publisher of the Chinook Observer and Coast River Business Journal.



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