

SHELLFISH HELP CLEAN OUR SOUND

In the interest of advancing the understanding of the environmental benefits of shellfish, and of shellfish farming, consider these quotes.

WOODS HOLE OCEANOGRAPHIC INSTITUTION

“Shellfish are by far the most cost-effective strategy to control pollution.”¹

ENVIRONMENTAL DEFENSE

“One type of aquaculture - mollusk farming - actually reduces nutrient pollution... Because 35-40% of the total organic matter ingested by a mollusk is used for growth and permanently removed by harvest of the mollusk.”²

ENVIRONMENTAL PROTECTION AGENCY

“EPA notes that mollusks are filter feeders and, in some cases, are recommended not only as a food source, but also as a pollution control technology in and of themselves. Mollusks remove pollutants from ambient waters via filtration.”³

PEW OCEANS COMMISSION

“Filter-feeding mollusks can clarify the water by consuming plankton in aquatic systems, significantly improving water quality. Mussel farms can remove nitrogen from water at a 70% higher rate than occurs in surrounding waters... Moreover, shellfish farmers are often among the loudest advocates for clean water.”⁴

WASHINGTON POST

“With many fisheries collapsing and others dwindling, development of responsible domestic aquaculture stands to relieve stressed wild species even as it reduces U.S. imports of unsustainably farmed seafood. What’s more, certain types of aquaculture – particularly the harvesting of mollusks – can actively aid water systems that benefit from the filtration they provide.”⁵

PUGET SOUND ACTION TEAM

“These filtering and recycling processes are critical in regulating the health of coastal ecosystems. The processes take on even greater importance as human activities and related pollution discharges increase in shoreline areas. The processes help counteract the potentially damaging effects of excessive nutrient enrichment of coastal waters, a process known as eutrophication.”⁶

SEAWEB

“Unlike other farmed species, shellfish remove organic particulates, suspended matter, and nutrients from the water and tend to improve overall water quality. Because shellfish are filter feeders they act as natural biofilters in the water, removing phytoplankton, sediments, and organic particles. For example, it is estimated that every kilogram of shellfish meat harvested results in a removal of 16.8 grams of nitrogen.”⁷

NATIONAL RESEARCH COUNCIL

“Nutrient over-enrichment is a significant problem for the coastal regions of the United States... Benthic filter feeders such as oysters, mussels, and many species of clams can have a major influence on phytoplankton populations in coastal waters.”⁸

SKOKOMISH TRIBE

“We are deeply concerned that more of these dead zones may exist in other parts of southern Hood Canal. Our treaty-protected resources and tribal economy are threatened by the declining health of Hood Canal.”⁹

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NATIONAL GEOGRAPHIC

“Oceans have a mighty appetite for swallowing carbon dioxide,” and “lovely carbon reservoirs—seashells to the layman” are one place the missing carbon goes.¹⁰

TIME MAGAZINE

“On an eco-friendly scale, bivalves generally rate highest among the more than 220 species of fish and shellfish that are cultivated commercially. Mussels and oysters are filter-feeders that make the surrounding water cleaner...”¹²

SCIENCE MAGAZINE

“Dense populations of oysters and other suspension-feeding bivalves graze plankton so efficiently that they limit blooms of phytoplankton and prevent symptoms of eutrophication, just as occurs with grazing by zooplankton in freshwater ecosystems.”¹⁴

U.S. ARMY CORPS OF ENGINEERS

“...we believe that there is generally a net overall increase in aquatic resource functions in estuaries or bays where shellfish are produced.”¹¹

SIERRA CLUB

“Excessive nutrients are by far the worst cause of the (Chesapeake) Bay’s pollution... The Bay’s health is deteriorating leaving the Bay’s oysters and signature blue crabs at risk, as well as the people who make their livelihood off fishing in the Bay.”¹³

U.S. NEWS & WORLD REPORT

“Eastern oysters are experts at sucking up the algae and silt that plague the Chesapeake.”¹⁵

For more information visit the Pacific Shellfish Institute’s website at www.pacshell.org.

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