

This revision of the Shellfish of Washington pamphlet is dedicated to the memory of our friend and colleague, Dwight Herren, who spent many hours updating the text and drawings.

Shellfish of Washington

For more information, or to request a copy of this brochure or other Washington Department of Fish and Wildlife publications, please contact one of the WDFW offices listed below:

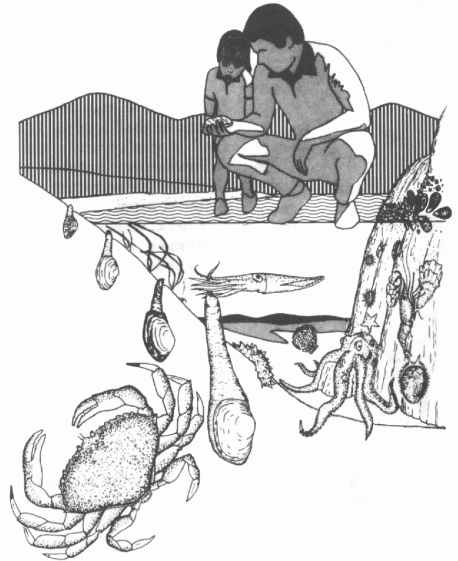
Point Whitney Shellfish Laboratory
1000 Point Whitney Road
Brinnon, WA 98320
Phone: (360) 586-1498 or 796-4601

Puget Sound Regional Office (Region 4)
16018 Mill Creek Boulevard
Mill Creek, WA 98012-1296
Phone: (425) 775-1311

Coastal Research Field Station
48 Devonshire Road
Montesano, WA 98563
Phone: (360) 586-6129 or 249-4628

Willapa Bay Shellfish Laboratory
267th and Sandridge Road
Ocean Park, WA 98640
Phone: (360) 665-4166

Headquarters
600 Capitol Way North (*mailing address*)
Olympia, WA 98501-1091
1111 Washington Street SE (*physical address*)
Phone: (360) 902-2200
Internet: <http://www.wa.gov/wdfw>



This pamphlet is designed to help you identify common shellfish you may find on the beach or in the water.* Refer to the appropriate regulations pamphlet for daily bag limits, seasons, gear restrictions and other information.

** See "Additional Publications" on the back of this pamphlet for squid, shrimp and razor clam information.*

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**Recycled paper conserves
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GENERAL INFORMATION

With over 2,750 miles of marine shoreline, Washington state beaches harbor a rich abundance of shellfish species. The diverse habitats along our beaches offer permanent and seasonal housing to some species, while others use these areas as resting or nursery areas. This environment and its inhabitants are fragile and vulnerable to human recreation and commercial activities, so please use it with respect and care.

REGULATIONS

Before seeking shellfish for personal use, familiarize yourself with daily bag limits, seasons, gear restrictions and other rules.

Regulations are published annually in the Washington Department of Fish and Wildlife (WDFW) sportfishing rules pamphlet, free at the department addresses listed on the back, and at most marinas and sporting goods stores.**

You should also be able to distinguish between different types of shellfish. This pamphlet will help you identify them, but for a more complete visual reference, please request a copy of the poster **Bivalve Shellfish of Washington** at one of the WDFW offices listed on the back of this brochure.

BEACH OWNERSHIP

Most beaches on Puget Sound are privately owned, and their use is allowed only with the owner's permission. The Washington Department of Natural Resources has a publication titled *Puget Sound Public Shellfish Sites* that shows the location of public beaches. This brochure may also be available at some of the WDFW sites listed on the back page.

****** *Emergency regulations are occasionally issued to open or close a season. Please consult one of the offices listed on the back of this pamphlet before harvesting shellfish.*

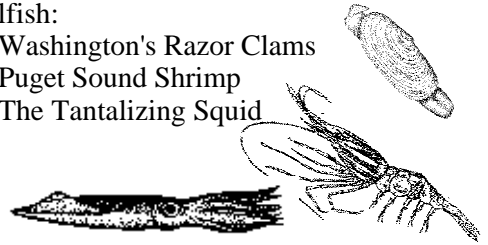
PHYTOTOXIN SHELLFISH POISONING

Eating shellfish contaminated by certain naturally-occurring one-celled algae can cause serious illness, even death. Paralytic Shellfishing Poisoning (PSP) affects clams, oysters, mussels and scallops when these bivalve shellfish feed on the dinoflagellate *Alexandrium cantenellum*, and moon snails that have eaten affected shellfish. Amnesic Shellfish Poisoning (ASP) affects bivalve shellfish that feed on *Nitzschia pungens* or *Pseudonitzschia australis* diatoms, and crabs that have eaten affected shellfish. Beaches are monitored frequently and closed when necessary to protect shellfish gatherers. To get the most current information on beach closures, call the toll-free "Marine Toxin Hotline" at 1-800-562-5632.

ADDITIONAL PUBLICATIONS

The WDFW publications listed below offer information on other Washington shellfish:

- Washington's Razor Clams
- Puget Sound Shrimp
- The Tantalizing Squid



The Washington Department of Fish and Wildlife will provide equal opportunities to all potential and existing employees without regard to race, creed, color, sex, sexual orientation, religion, age, marital status, national origin, disability, or Vietnam Era Veteran's status. The department receives Federal Aid for fish and wildlife restoration.

The department is subject to Title VI of the Civil Rights Act of 1964 and Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of race, color, national origin or handicap. If you believe you have been discriminated against in any department program, activity, or facility, or if you want further information about Title VI or Section 504, write to: Office of Equal Opportunity, U.S. Department of Interior, Washington, D.C. 20240, or Washington Department of Fish and Wildlife, 600 Capitol Way N, Olympia WA 98501-1091.

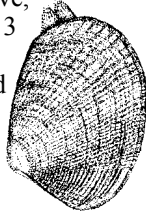
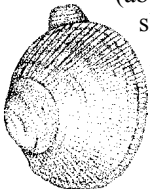
This publication is available in alternative formats upon request. Please call the Olympia office of the Washington Department of Fish and Wildlife at (360) 902-2200, or TDD (360) 902-2207 for more information.

HARDSHELL CLAMS

Hardshell clams include Manila, native littleneck and butter clams, cockles, macomas and a few others of little harvesting interest. These clams are found on beaches of mixed sand, gravel and mud. They are commonly harvested using shovels or rakes. Except for the larger butter clams, rakes are usually more effective, and are less damaging to the clams and the beach.

Littleneck clams, Manila and native, are similar in appearance and grow to 3 or 4 inches in length. The shells of both species have concentric rings and radiating ridges. Manila clams

(above right) have oblong, slightly colored and patterned shells with purple staining inside. Native littlenecks (left) generally have round, chalky-white shells.



Butter clams grow to 6 inches in length. Their shells are usually chalky-white without radiating ridges. The siphon or neck can retract completely into the shell.



Cockles are easily recognized by their prominent, evenly-spaced radiating ridges fanning out from the hinge area to the shell margin.

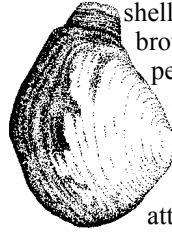
They have a mottled, light-brown shell and can grow to 4½ inches. Cockles are found near or on the surface of sand-gravel beaches throughout Puget Sound.



Macomas have wafer-thin, chalky-white shells and reach a maximum length of about 4 inches. They appear to have two necks, but these are actually in-current and ex-current siphons. Macomas are generally found 4 to 6 inches below the surface in the middle of the intertidal zone.

HORSE CLAMS

Horse clams grow to 8 inches in length. The shell is chalky-white with yellow-brown patches of skin-like periostracum. The shell is flared around the siphon, which cannot be withdrawn into the shell. The siphon is tipped with leathery flaps, often with algae or barnacles attached.



SOFTSHELL CLAMS

Softshell clams, often mistaken for small horse clams, can reach 6 inches in length. Their chalky-white shells are rounded at the foot end and pointed at the siphon end. They are found buried 8 to 14 inches in mud or sand bottoms in bays or near the mouths of rivers.



GEODUCKS

Geoducks are the world's largest burrowing clam. They can weigh up to 10 pounds, and live up to 140 years. The geoduck's long siphon lacks the leather-like flaps of the horse clam. Geoducks are found buried 2 to 3 feet deep, and are abundant subtidally, less common intertidally.



Sport diggers harvest geoducks on extremely low tides (at least minus 2 feet) using a large, open-bottomed can to prevent the sides of the hole from caving in. In very soft sand or mud bottoms, sport divers can sometimes remove geoducks by hand.

OYSTERS

Oysters have irregular, chalky-white shells that are often distorted to conform to the shape of the object to which the oyster is attached. Oysters are often found in groups attached to one another or to an object such as a rock or a shell.



Most recreational oyster harvest occurs in Hood Canal. Spawning during the summer temporarily reduces the quality of oysters, making them less desirable.

MUSSELS

Mussels have oblong, blue-black or brown shells and are usually found in dense mats attached to solid objects by fine threads. The blue, or bay mussel of Puget Sound can grow to 3 inches in length, while the California mussel, found on the open coast, can grow to over 6 inches. Mussels are detached, scrubbed, and then steamed or cooked like clams.



SCALLOPS

Four species of scallops are harvested from local waters. *Pink scallops* and *spiny scallops* grow to about 2½ inches. The rare *weathervane scallop* and the heavy-shelled *rock scallop* both can reach 9 inches in size. Unlike the other scallop species, adult rock scallops cannot swim, but attach themselves to rocks. Scallops are found subtidally throughout Puget Sound, especially in the northern sound, the San Juan Islands, and the Strait of Juan de Fuca. They are usually harvested by divers.

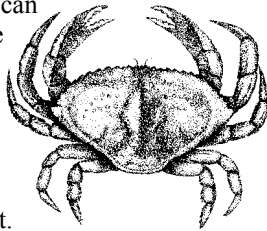


CRABS

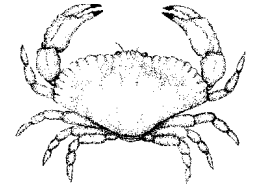
Two crab species are harvested locally: Dungeness and red rock crabs. Crabs are commonly harvested with crab pots, but also caught using ring nets, dip nets, and by wading in shallow water during spring and early summer.

The *Dungeness crab* can reach 10 inches across the back, with 6 to 7 inches being more common. This crab is most abundant in Puget Sound north of Seattle, in Hood Canal, and along the coast.

The Dungeness crab is frequently associated with eelgrass beds, and prefers sandy or muddy substrates. The shell is purple-tinged, grayish-brown on the back, with white-tipped claws.



The *red rock crab* is smaller than the Dungeness, with a heavy brick-red shell and black-tipped claws. It is found throughout Puget Sound, including the south sound, and prefers rocky substrates.



OCTOPUS

Puget Sound octopus are the world's largest, growing to over 100 pounds. They have eight suction-cup studded arms that are used to catch fish and crabs. Octopus are relatively abundant throughout Puget Sound, especially in rocky areas where they find dens or grottos in which to hide and protect their eggs, which are brooded for 3-5 months. Octopus are harvested by hand by sport divers, but are caught commercially using pots.



SEA URCHIN

Urchins look like pin cushions with hundreds of sharp spines. There are three common species: green, red and purple. Urchins are found in rocky areas, especially kelp beds, in northern Puget Sound, the San Juan Islands and the Strait of Juan de Fuca. Most urchins are harvested by divers. Their gonads, which look like segments of an orange, are considered a delicacy.



SEA CUCUMBER

Sea cucumbers are large (up to 18 inches long), soft-bodied animals with reddish, warty skin. They are found subtidally throughout Puget Sound, and are usually harvested by divers. The five longitudinal muscle bands lining the body cavity can be cooked like clam strips.

