

Oregon's Captivating Clams



Oregon State University Extension Service
Sea Grant Marine Advisory Program
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CLAM digging is an exciting, inexpensive, and popular sport that combines fun and outdoor recreation for the entire family. It also provides a year-round source of excellent food.

Living within Oregon's coastal bays are one or more of five major clam species—gaper, cockle, littleneck, butter, and softshell. A sixth, the razor clam, inhabits the sandy, surf-pounded beaches along certain sections of the coast; it is occasionally found in the lower reaches of several bays.

Identification

The other side of this bulletin is a poster-size chart that summarizes handy information about each type of clam: common and scientific names, regulations, habitat, location, relative abundance, mobility, size, and cooking. (For more precise local information, check the chamber of commerce, tackle shops, motels, and the county Extension office.)

Digging

What to wear. Remember that you will be walking on (and in) sand, mud, gravel, and water; boots or heavy shoes are recommended. You will also be kneeling a lot, and putting your arm into clam holes; dress accordingly.

Bay clams are immobile—they stay at the same depth throughout the time you are digging.

Gapers and softshells are most easily taken with a shovel. An ordinary garden spade is adequate, but many diggers prefer a shovel with a much narrower blade.

Cockle and littleneck clams can also be harvested with a shovel, but a garden (4-tined) rake or long-tined potato fork is much more efficient ("blind digging"); these clams are found on or near the surface, and their holes are diffi-

cult to recognize. (You can often feel them with your feet.) In certain areas, the rocky habitat of littleneck clams also makes it difficult to use a shovel, though sometimes a narrow-bladed shovel is effective.

Butter clams are most easily taken with a narrow shovel or long-tined fork. Their cigar-shaped or deflated figure-8 holes are easily recognized.

Razor clams. Razors, unlike bay clams, are highly mobile; they dig vertically with ease. In soft sand, razors can burrow up to 1 to 2 feet a minute, depending on how loose the sand is. You have to dig fast to catch razors.

"Dry" *digging* is done in wet, hard-packed sand that is not covered with standing water or being washed by waves. Look for prominent pits (dimples) about the diameter of a pencil or for tiny, donutlike impressions. Razors are usually found deeper under dry-digging conditions (12 to 18 inches) than when wet-digging (6 to 8 inches).

For *wet digging*, walk slowly through shallow water, tapping the sand with the end of the shovel handle. A razor disturbed by this tapping retracts its neck, momentarily leaving a pit or dimple that quickly fills with water-washed sand.

Occasionally, the tip of a razor's neck is visible at the surface of the sand. This normally occurs in very shallow water, and usually the only part showing is the tiny, black double rosette.

When you spot a razor clam hole, push the shovel blade straight down its entire length, 2 to 3 inches to the *ocean side* of the hole. Push the shovel handle toward the beach. Work it back and forth a couple of times and run your hand down behind and under the tip of the blade. At the same time, withdraw the shovel and feel through the sand for the clam.

Razor clams are always oriented in the sand with the hinge (dull edge) of the shell toward the ocean, so *always dig on the ocean side of the hole to avoid cutting your hand on the sharp shell edge.*



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Tides

Minus tides are usually best for clamming. The heaviest concentrations of clams normally are on the lower margins of the beach and on the tide flats, the areas exposed only by minus tides. The earliest suitable tide of a series is usually the most productive, especially for razors.

This does not mean that you cannot go clamming on other tides. You can take softshells, which live from just below the high-tide line to below the low-tide mark, on +1.0 to +3.0 tides in certain areas of most bays (once again, check for good *local* information about the digging area you plan to visit).

Regulations

Protective regulations for taking each type of clam are on the other side of this sheet; *because regulations may be changed from year to year, be sure to check current Fish Commission of Oregon regulations.* Note also:

(1) You may not take or store more than 2 daily limits of bay and razor clams in any 7 consecutive days. (2) You are required by law *both to dig your own limit and to provide a container for your own clams.* It is not necessary for each digger to have his or her own digging tool. You must keep broken or crushed clams and count them as part of your limit. (3) Clams must be removed from where they were harvested before being shucked or cleaned. (4) No license is required for sport digging of clams in Oregon (as of Jan. 1975).

Transportation

A problem facing clam diggers who live considerable distances from the coast is getting their clams home. One of the easiest ways is to leave them in the shell and put them into a wet burlap bag. If you use a bucket, empty all the water and cover the clams with a wet burlap bag. Clams with unbroken shells will live 1 to 4 days, if kept cool; it is always recommendable, however, to clean them as soon as possible.

If you clean your clams at the seashore, put them on ice; seafood spoils rapidly at warm temperatures.

Steaming, frying, or mincing?

Are you ready to clean? *Stop! Decide first how you will cook your clams;* this is important, because steaming, frying, and mincing require different preparation (see the "Cooking" column on the chart).

Cleaning for steaming

Littlenecks, softshells, and small butter clams are good steamed. Because you steam clams in the shell and eat them whole, you may first want to remove the sand and grit. There are two methods for this:

(1) Put the clams in a bucket with a solution of one cup corn meal and one cup salt per gallon of water. In 4 to 8 hours the clams should pump themselves free of sand. *Do not leave clams in this solution for more than 36 hours.*

(2) Or put the clams in a burlap bag or a wire basket and hang it overboard or from a dock, in bay water. Clams need 12 to 18 hours to pump all sand and grit out of their systems when you use this method.

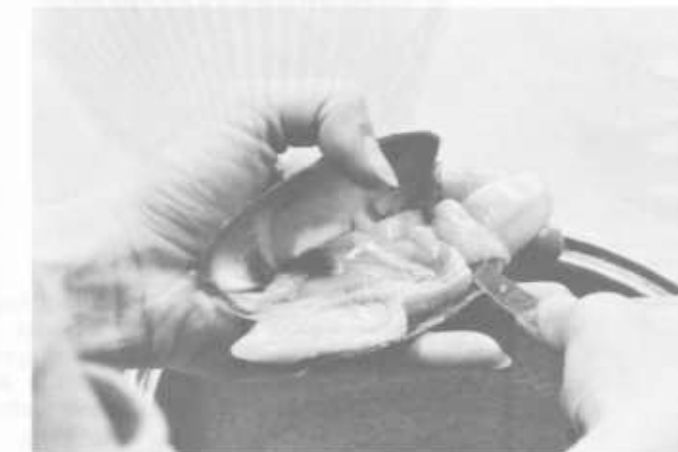
Removing shells (shucking) for frying and mincing

If you plan to *fry or mince* your clams, your first task is to shell them. Shucking is usually easier if the clams have been blanched (dipped in boiling water for 10 to 60 seconds) before you start removing the shells.

Gapers, softshells, and razors:



(1) Holding the clam with its open side toward you, run the knife blade between the clam meat and the top shell, cutting the round adductor muscle near the clam's foot.



(2) Open the clam and repeat the step above, to remove the clam meat from the bottom shell.

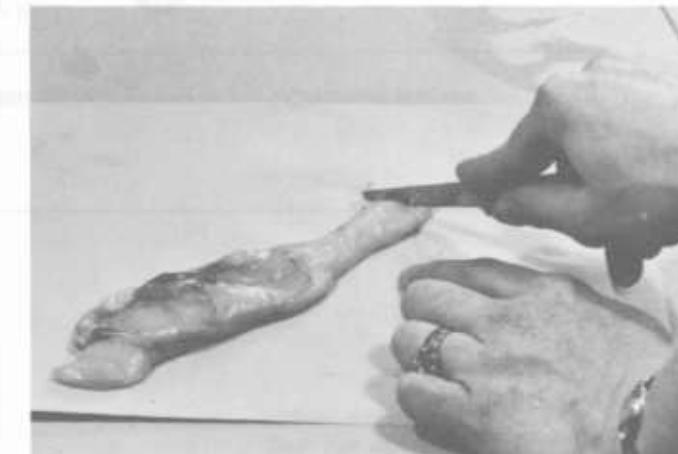
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Cockles, littlenecks, and butter clams. These are harder to open with a knife because they close so tightly, so they must be blanched (dipped in boiling water for 10 to 60 seconds), just until the shells open. Remove opened clams immediately, to prevent cooking. If any clam meat does not easily detach from the shell, follow steps (1) and (2) above, under "Gapers, softshells, and razors."

Cleaning for frying

Although you can fry all clams described in this bulletin (*but see "Gapers—necks," below*), razors and softshells are the two most people fry.

Razors:



(1) Cut the black tip off the neck.



(2) Split the neck lengthwise. (Continued on panel 7)

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Small gapers like this one are easily confused with softshells. Gapers are found in a number of sizes.

GAPER

Large size (up to 7 inches long). Large gape (opening between the shells) where the neck protrudes. The large neck, covered by dark, wrinkled skin, has two leatherlike flaps on the tip. Shell usually has an eroded dark covering.

Do not be surprised if, when cleaning a gaper, one or two small, round crabs suddenly appear from inside the shell. These harmless crabs take shelter inside the shell and are found in almost every gaper. (Similar crabs are also found occasionally in the softshell and the razor clam.)



COCKLE

Shell has prominent, evenly spaced ridges outside; these ridges fan out from the hinge to the edge, creating a definite scalloped appearance.

When disturbed, the cockle retracts all body parts and closes the shells tightly.



LITTLENECK



Shell has radiating ribs like the cockle's (but the littleneck's ribs are much less prominent), and concentric lines running at right angles give the shell a crosshatched appearance.

Common Names	Scientific Name	Regulations*			Habitat	How to Locate and Harvest	Relative Abundance	Mobility	Average Size	Cooking	Common Names
		Daily Bag Limit	Season								
Gaper Horse, Horseneck, Blue, Empire	<i>Tresus capax</i>	An aggregate total of the first thirty-six (36) gaper, cockle, softshell, butter, or littleneck clams dug, regardless of size and condition, not more than twelve (12) of which may be gapers. (The razor clam bag limit is separate from this.)	SEASON OPEN YEAR-ROUND		In bays; sand or sand-mud from 10 to 24 inches below surface.	Circular hole up to 1 1/4 inches in diameter. By sticking your finger into hole, you can feel neck retract downward. <i>Shovel.</i>	Common but heavily dug in lower reaches of Tillamook, Netarts, Yaquina, and Coos Bays.	Gapers can only retract neck.	4 to 5 inches	<i>Digger foot:</i> fry or mince (chowder) <i>Neck:</i> fry or mince	Gaper Horse, Horseneck, Blue, Empire
Cockle Cockerel, Basket Cockle	<i>Clino-cardium nuttallii</i>				In bays; sand or sand-mud. May be found on surface or down to 3 or 4 inches below.	Hole is difficult to detect. Sometimes a very small double hole. You can often feel the clams with your feet on tidal flats. <i>Rake.</i>	Common in Tillamook, Netarts, Yaquina, and Coos Bays.	Cockles can reposition up to 4 inches below surface.	2 1/2 to 3 1/2 inches	Fry or mince (chowder)	Cockle Cockerel, Basket Cockle
Littleneck Steamer, Butter	<i>Venerupis staminea</i>				In bays or gravelly ocean outcrops; sand-mud or sand-gravel from 1 to 6 inches below surface.	Deflated figure-8-shaped hole, 1/4 to 1/2 inch long. <i>Rake.</i>	Found in limited sand or gravel areas of larger bays and rocky ocean outcrops. Heavily dug in Tillamook Bay.	Littlenecks can only retract short neck.	1 to 2 inches	Steam	Littleneck Steamer, Butter
Butter Washington, Beefsteak, Quahog	<i>Saxidomus giganteus</i>				In bays; gravel-mud or sand-mud from 6 to 12 inches below surface.	Cigar-shaped or deflated figure-8-shaped hole, 1/2 to 3/4 inch long. <i>Shovel or rake.</i>	Found in gravel and mud-sand areas of several bays. Moderate to heavy digging in Coos, Netarts, and Tillamook Bays.	Butters can only retract neck.	2 to 3 inches	Fry, mince, or steam	Butter Washington, Beefsteak, Quahog
Softshell Eastern, Mud, Eastern Softshell	<i>Mya arenaria</i>				In bays, further up than other clams. Mud or sandy mud, from 6 to 14 inches below surface.	Oblong hole up to 1 inch in diameter. By sticking your finger into hole, you can feel neck retract downward. <i>Shovel.</i>	Common in most Oregon bays; abundant in upper reaches of larger bays. Digging very light or nonexistent, except in Umpqua, Siuslaw, and Yaquina Bays.	Softshells can only retract neck.	2 to 4 inches	Fry or steam	Softshell Eastern, Mud, Eastern Softshell
Razor	<i>Siliqua patula</i>	First twenty-four (24) clams dug, regardless of size or condition.	From Tillamook Head south, open year-round. From Tillamook Head north, open Sept. 1 to July 14.	Open ocean beaches, from 6 to 18 inches below surface; near the mouths of several bays.	Prominent pits or dimples in the sand. <i>Shovel.</i>	Common on beaches north of Tillamook Head, with heavy digging pressure. Found in scattered locations south of Tillamook Head, with moderate digging pressure.	Razors can dig up to 1 to 2 feet vertically per minute in soft sand.	3 to 5 inches	Fry	Razor	

* Regulations are subject to change; check with the Fish Commission of Oregon. See also "Regulations" on the other side of this chart.

Very thick, oval shell has fine, poorly defined circular lines on the outside; relatively short, black-tipped neck.

BUTTER



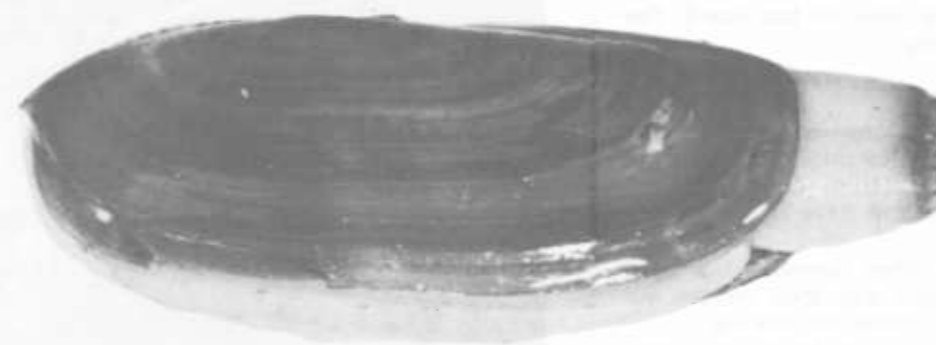
SOFTSHELL

The elongate, thin, brittle shell may be partially covered by a gray-brown skin. The neck looks like the gaper's but lacks the gaper's two leatherlike flaps on the tip.

Softshells also occur in many small bays where there are no other clams.

RAZOR

Thin, oval shell has a smooth, lacquerlike, light brown coating that distinguishes it from any of the bay clams.

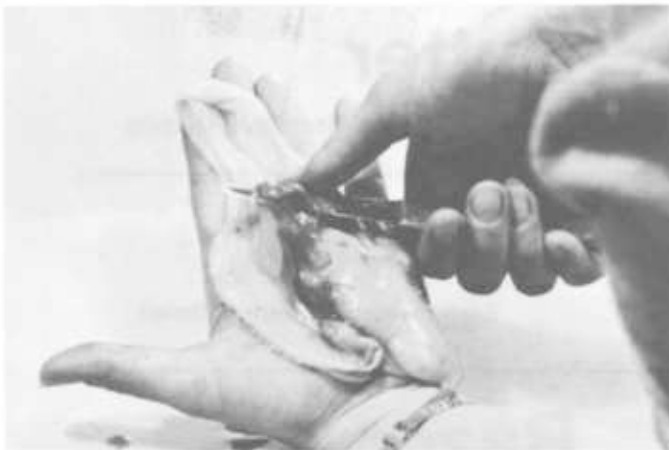


Oregon's Captivating Clams

On the other side: Digging, Tides, Regulations, Transportation, Cleaning, Shucking, Storage, Steaming, Frying, Mincing, and Further Reading

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(3) Cut away the gills.



(4) Slit the digger foot lengthwise.



(5) Turn the clam over to cut the gut on the back (the hinge side). You are now ready to scrape out all dark-colored material and wash the clam.



(6) The cleaned clam is now ready for frying.

Softshells (similar to cleaning razors). (1) Cut the tip off the neck. (2) Split the neck lengthwise; wash out any sand and grit. (3) Pull the sheath (fine outer skin) from the neck. (4) Although not necessary, you may want to remove the dark-colored material from the gut of large softshells. (5) You may also want to tenderize necks by gentle pounding. The clam is ready for frying.

Gapers—digger feet. The digger foot is tender and is good fried. (1) Separate the neck from the digger foot with your fingers. (2) Cut the digger foot lengthwise; remove the dark material. The digger foot is ready for frying.

Gapers—necks. The tough and rubbery neck can be fried *if tenderized first*; otherwise, mince and use in chowder. (1) Pull the neck away from the digger foot. (2) Cut ½ inch off the end of the neck. (3) Remove the dark outer skin. To make this step easier, soak the necks 4 hours in fresh tap water or freeze them, then thaw and peel. A faster method is to boil *about 1 minute*, until the skin peels freely. (4) Split the neck lengthwise; wash away all sand and grit. *To tenderize:* pound repeatedly with a mallet or place between a pair of 2x8-inch boards (1 foot long) and give a sharp hammer blow on top board. The gaper neck is now ready for frying.

Cleaning for mincing

As with frying, any clam in this bulletin may be minced; however, most cooks mince only clams that are tough when steamed or fried whole—cockles, larger butter clams, and gaper necks that have not been tenderized.

Cockles and butter clams. After removing the meat from the shell, split the foot part way, then remove the dark material. The remainder is ready for mincing.

Gapers—necks. Prepare as above for frying gaper necks (steps 1 through 4).

Storage

Refrigeration. Clams in the shell (with shells unbroken) will live in the refrigerator up to 7 days, depending on the species; it is best, however, to use them within 2 to 3 days.

Cleaned clams also keep under refrigeration. Cold storage (for 1 to 2 days) speeds the breakdown of tissues, making them tenderer.

Freezing. Both cleaned clams and clams in the shell can safely be frozen raw. Cockles, littlenecks, and small butters and softshells keep frozen in the shell up to 6 months, but it is best to store them no more than 3 months. Gapers and razors frozen in the shell, in contrast, do not keep as well as the others; they are better when cleaned before freezing. Remember: usually, the faster any food freezes, the better its quality and the longer its storage life.

Freezing clams in the shell. (1) Place the clams in a waterproof, heavy-gauge plastic bag. (2) Submerge the bag in a pan of water, keeping its mouth above water (this forces the air out of the bag). (3) Tightly seal the bag. (4) Place the sealed bag of clams in a similar, larger bag; remove all air from this larger bag and seal it also. (5) Store the package in your freezer.

Freezing cleaned clams. (1) Wrap several clams tightly in "cling" wrap, forming a tight skin around them. (2) Pack cling-wrapped clams in batches of about 1 pound each (but no more). (3) "Master-bag" each 1-pound group in a good strong plastic bag for freezing.



Cooking

Clams are among the most delectable of shellfish when properly prepared.

Steaming clams. (1) Place 1 inch of salted water in a large covered pan; bring to a boil. (2) Drop clams directly into the pan or into a wire basket placed in the pan; it is not necessary that the water completely cover them. (3) Replace lid; bring water back to a boil. (4) Let steam for 5 to 10 minutes, until all shells gape open. (5) Remove clams from pan. When cooking live clams, discard any that did not open when steamed. Serve. (6) Remove meat from the shell with a fork and dip in nectar or melted butter. (7) To prepare nectar, pour broth through a fine-mesh strainer to remove grit; use as a dip or drink it straight.

Frying clams. (1) Roll cleaned clams in flour. (2) Dip in well-beaten egg mixture. (3) Roll in a flour-cornmeal mix or cracker crumbs. (4) Fry at 400° F in hot oil until golden brown, *usually no more than 30 seconds on a side*. Overcooking results in tough, rubbery texture. (5) Drain on paper towels; serve hot.

Mincing clams. Chop into fine pieces with a knife or put through a food grinder. Minced clams are good for clam fritters, chowder, or combination dishes (casseroles).

Further reading

Berg, Iola I., *Shellfish Cookbook*, State of Washington Department of Fisheries (Olympia, 1968).

Osterhaug, Kathryn L., and Rose G. Kerr, *How to Cook Clams*, U.S. Department of Interior, Fish and Wildlife Service, Bureau of Commercial Fisheries, Test Kitchen Series No. 8 (Washington: U.S. Government Printing Office, 1953).

Wilkinson, Burford, *Let's Clam in Tillamook County*, Tillamook County [Oregon] Chamber of Commerce and Tillamook County Court.



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