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OREGON'S CAPTIVATING CLAMS

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R. W. Jacobson
D. W. Hight
K. S. Underhill
Oregon State
University
Pullman, WA

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

Gapers—necks. You can fry the tough and rubbery neck if you tenderize it first; otherwise, mince and use in chowder. (1) Pull the neck away from the digger. (2) Cut ½ inch off the end of the neck. (3) Remove the dark outer skin. To do this, 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.

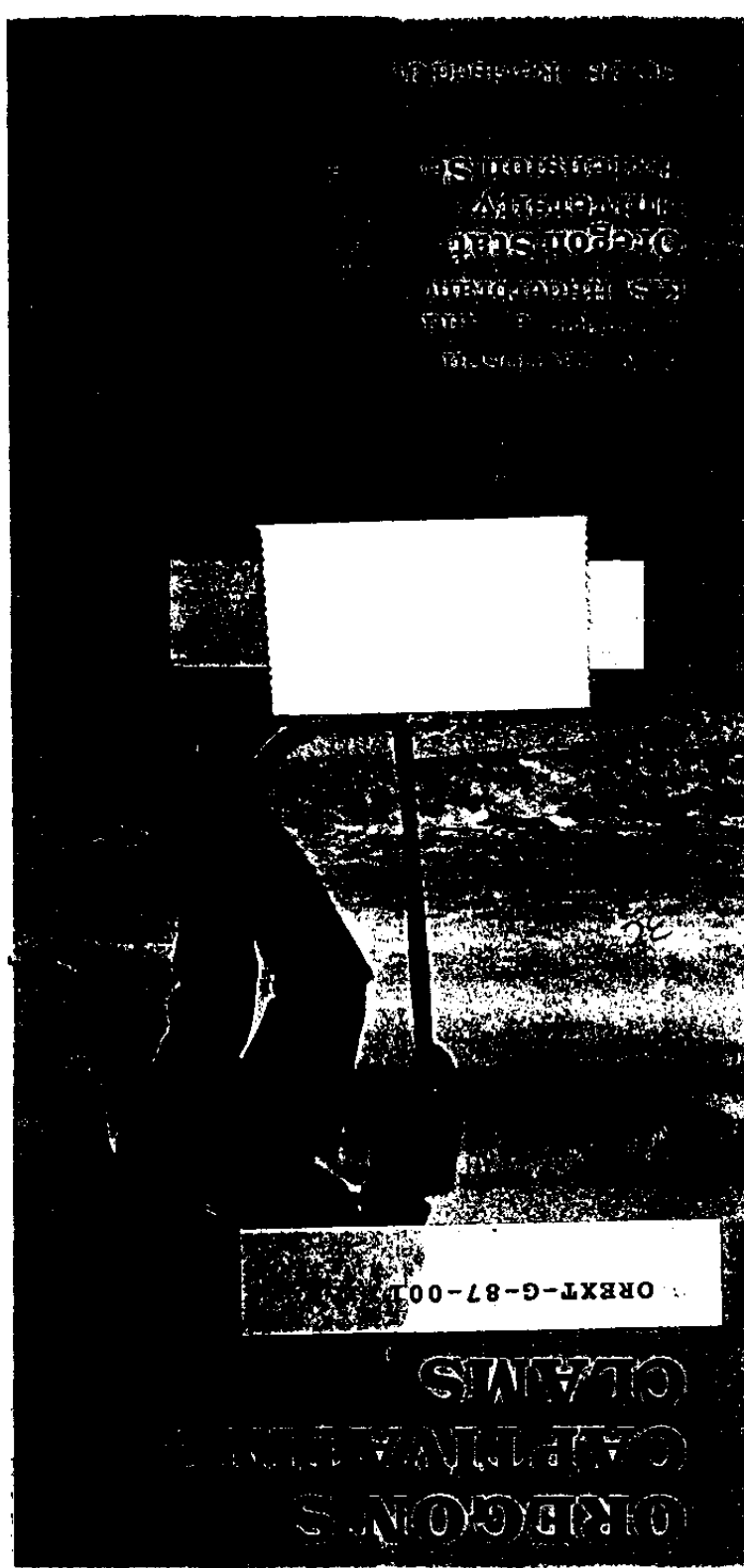
To tenderize: pound repeatedly with a mallet or place between a pair of 2 x 8-inch boards (1 foot long) and give a sharp hammer blow on top board. The gaper neck is now ready for frying.

Cleaning for mincing

As with frying, you may mince any clam in this publication; however, most cooks mince only clams that are tough when steamed or fried whole—cockles, larger butter clams, and gaper necks that haven't 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 you would for frying gaper necks (steps 1 through 4).



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. The O Extension/Sea Grant Program, the Oregon Department of Fish and Wildlife, and members of the oyster industry are cooperating to supplement the native littleneck stocks through the introduction of the Manila littleneck clam in several Oregon bays.

The razor clam, another major species, inhabits the sandy, surf-pounded beaches along certain sections of the coast. It's occasionally found in the lower portions of several bays.

Identification

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

Digging

What to wear. Remember that you'll be walking on (and in) sand, mud, gravel, and water. Boots or heavy shoes are recommended. You'll 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're 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 is much more efficient. These clams are found on or near the surface, and their holes are difficult to recognize. (You can often feel cockles 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 spade is effective.

Butter clams are most easily taken with a narrow shovel or long-tined fork. It's easy to recognize their keyhole-shaped siphon holes.

OREGON'S CAPTIVATING CLAMS

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.

When you're cleaning a gaper, don't be surprised if 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 (you'll find similar crabs occasionally in softshell and razor clams).

Common names
Horse, Horseneck, Blue, Empire

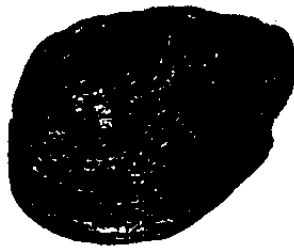
Scientific name
Tresus Capax

Daily bag limit
For current bag limits, consult the Oregon Department of Fish and Wildlife Sports Angling Synopsis (a booklet available at most sporting goods outlets). See also "Regulations" on the other side of this chart.

Season
Open year-round.
See also "Regulations" on the other side of this chart.

Habitat
In bays: sand or sand-mud from 10 to 24 inches below surface.

How to locate and harvest
Circular hole up to 1 3/4 inches in diameter. By sticking your finger into hole, you can feel neck retract downward. Shovel.



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



Relative abundance
Common but heavily dug in lower reaches of Tillamook, Netarts, Yaquina, and Coos Bays.

Mobility
Gapers can only retract neck.

Average size
4 to 5 inches

Cooking suggestions
Digger foot: fry or mince (chowder).
Neck: fry or mince.

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
Steamer, Butter, Native

Scientific name
Venerupis staminea

Daily bag limit
For current bag limits, consult the Oregon Department of Fish and Wildlife Sports Angling Synopsis (a booklet available at most sporting goods outlets). See also "Regulations" on the other side of this chart.

Season
Open year-round. See also "Regulations" on the other side of this chart.

Habitat
In bays or gravelly ocean outcrops: sand-mud or sand-gravel from 1 to 6 inches below surface.

How to locate and harvest
Deflated figure-8-shaped hole, 1/4 to 1/2 inch long. Rake or shovel.

Relative abundance
Found in limited sand or gravel areas of larger bays and rocky ocean outcrops. Heavily dug in Tillamook Bay.

Mobility
Littlenecks can only retract short neck.

Average size
1 to 2 inches

Cooking suggestion
Steam



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.

Common names
Cockerel,
Basket Cockle

Scientific name
Clinocardium nuttallii



Daily bag limit
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Season
Open year-round. See also "Regulations" on the other side of this chart.

Habitat
In bays: sand or sand-mud. May be found on surface or down to 3 or 4 inches below.

How to locate and harvest
Hole is difficult to detect. Sometimes a very small double hole. You can often feel the clams with your feet on tidal flats. Rake.

Relative abundance
Common in Tillamook, Netarts, Yaquina, and Coos Bays.

Mobility
Cockles can reposition up to 4 inches below surface.

Average size
2 1/2 to 3 1/2 inches

Cooking suggestions
Fry or mince (chowder)

BUTTER

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

Common names
Washington,
Beefsteak, Quahog

Scientific name
Saxidomus giganteus

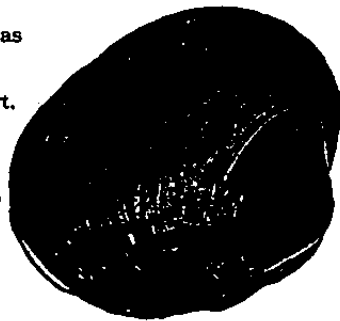
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Season
Open year-round. See also "Regulations" on the other side of this chart.

Habitat
In bays; gravel-mud or sand-mud from 6 to 12 inches below surface.

How to locate and harvest
Keyhole-shaped hole, 1/2 to 3/4 inch long. Shovel or rake.

Relative abundance
Found in gravel and mud-sand areas of several bays. Moderate to heavy digging in Coos, Nctarts, and Tillamook Bays.



Mobility
Butters can only retract neck.

Average size
2 to 3 inches

Cooking suggestions
Fry, mince, or steam

SOFTSHELL

The elongate, thin, brittle shell may be partially covered by a gray-brown skin. The neck looks like the gaper's, but it lacks the gaper's two leather-like flaps on the tip. Softshells also occur in many small bays where there are no other clams.

Common names
Eastern Mud, Eastern Softshell

Scientific name
Mya arenaria

Daily bag limit
For current bag limits, consult the Oregon Department of Fish and Wildlife *Sports Angling Synopsi*s (a booklet available at most sporting goods outlets). See also "Regulations" on the other side of this chart.

Relative abundance
Common on beaches north of Tillamook Head, with heavy digging pressure. Found in scattered locations south of Tillamook Head, with moderate digging pressure.

Mobility
Razors can dig up to 1 to 2 feet vertically per minute in soft sand.

Average size
3 to 5 inches

Cooking suggestion
Fry



Season
Open year-round. See also "Regulations" on the other side of this chart.

Habitat
In bays, further up than other clams. Mud or sandy mud, from 6 to 14 inches below surface.

How to locate and harvest
Oblong hole can be 1/2 to 1 inch in diameter. By sticking your finger into hole, you can feel neck retract downward. shovel.

Relative abundance
Common in most Oregon bays; abundant in upper reaches of larger bays.

Mobility
Softshells can only retract neck.

Average size
2 to 4 inches

Cooking suggestions
Fry or steam



RAZOR

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

Scientific name
Siliqua patula

Daily bag limit
First twenty-four (24) clams dug, regardless of size or condition.

Season
From Tillamook Head south, open year-round. From Tillamook Head north, open Sept. 1 through July 14.

Habitat
Open ocean beaches, from 6 to 18 inches below surface; near the mouths of several bays.

How to locate and harvest
Prominent pits or dimples in the sand. Shovel.

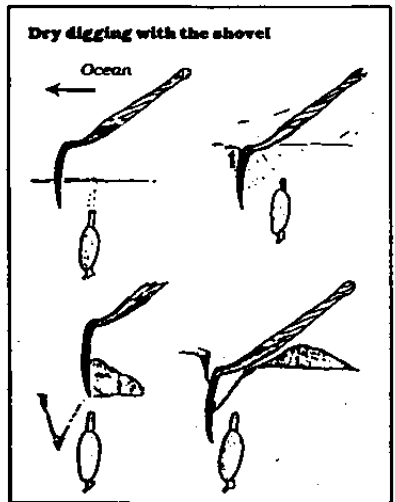


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On the other side: Digging, Tides, Regulations, Transportati-
Cleaning, Shucking, Storage, Steaming, Frying, and Mince.

"Dry" digging is done in well, tight-packed sand that's neither covered with standing water nor washed by waves. You can often make razors show by stomping your feet on the sand. Razors are usually found deeper under dry-digging conditions (12 to 18 inches) than wet-digging (6 to 8 inches).

Dry digging with the shovel. Place the shovel blade 4 to 6 inches seaward of the clam show. Use your body weight to push the shovel blade straight into the sand. Pull the handle just enough to break suction in the sand. Don't pry back on the handle. Keep the shovel blade nearly vertical to avoid slicing the clam. Remove sand by lifting the shovel upward and forward. Succeeding shovelfuls expose the clam enough to reach down and grasp its shell.



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, 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 small, black double rosette.

When you spot a razor clam hole while wet digging, 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 carefully feel through the sand for the clam.

Razor clams are nearly 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.

Tides



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

This doesn't mean you can't 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 locally about the digging area you plan to visit).

Regulations

Department of Fish and Wildlife regulations can change from year to year. Be sure to check current regulations, especially about licenses (not required in recent years) and daily bag limits. Regulation booklets are available at most sporting goods outlets. Note also:

You must dig your own clams and provide a container for them. It's not necessary for each digger to have her or his own digging tool.

You must remove clams from the harvest area before you shuck or clean them.

You may sort unbroken cockle, butter, and littleneck clams for size and return the unwanted ones in the immediate digging areas. You must keep all other clams, regardless of size and condition.

Clams that aren't specifically identified in the regulations (bentnose clams, for example) are classified as "others," and they're included in the softshell daily limit.

Transportation

If you live a considerable distance from the coast, getting your clams home may be a problem. 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's always preferable, however, to clean them as soon as possible.

If you clean your clams at the seashore, put them on ice (but keep the meats away from direct contact with ice). Seafood spoils rapidly at warm temperatures.

Steaming, frying, or mincing?

Are you ready to clean? Stop! Decide first how you'll cook your clams. This is important because steaming, frying, and mincing require different preparation (see also the cooking suggestions on the other side).

Cleaning for steaming

Littlenecks, small softshells, and 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: (1) Put the clams in a bucket with a solution of 1/4 cup salt per gallon of cold water. Periodically sprinkle corn meal on the surface of the water. In 8 to 12 hours, the clams should pump themselves mostly free of sand. Don't leave clams in this solution for more than 36 hours. (2) 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; 3 to 5 seconds for razor clams) before removing the shells.

Gapers, softshells, and razors (see photos 1 and 2).



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 each end of the clam.



2. Open the clam and repeat your action in photo 1, to remove the clam meat from the bottom shell.

Cockles, littlenecks, and butter clams. These are harder to open with a knife because they close so tightly. Blanch them (dip in boiling water for 10 to 60 seconds) just until the shells open. Remove opened clams immediately and immerse in cold water to prevent cooking. If any clam meat doesn't easily detach from the shell, follow the steps in photos 1 and 2.

CLAMMING FOR FRYING

Although you can fry all clams described in this publication (but see "Gapers—necks," below), razors and softshells are the two types most commonly fried.

Razors (see photos 3 to 8).



3. Cut the black tip off the neck.



4. Split the neck lengthwise.



5. Cut away the gills.



6. Slit the digger foot lengthwise.



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



8. The cleaned clam is now ready for frying.

Storage

Refrigeration. Clams in the shell (with shells unbroken) will live in the refrigerator up to 7 days, depending on the species (it's 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 more tender.

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's best to store them no more than 3 months. Gapers and razors frozen in the shell, in contrast, don't keep as well as the others; they're better if you clean them before freezing.

Remember: It's usually true that 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 ½ inch of 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's 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. 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 cheesecloth 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).

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Razor clams reveal their location by leaving "shows," or holes, about the diameter of a pencil when they withdraw their necks. Unlike bay clams, razors are highly mobile—they dig vertically with ease. In soft sand, razors can burrow up to 1 to 2 feet a minute, depending how loose the sand is. You have to dig fast to catch razors!

Two basic tools. Diggers use the shovel (a narrow-bladed clam shovel is preferable) and the tube. The shovel works well in the surf as well as in wet, hard-packed sand, but the tube is more often used in the wet sand.

Using the tube. Face the ocean and center the tube over the clam show. Slant the top of the tube slightly toward the land behind you. Walk the tube down 8 to 12 inches below the surf. Place your thumb over the air vent and pull the tube and sand core. Do this one or more times. Check each core that you bring up (the clam may be concealed within it). If the clam doesn't come up with the tube, reach into the hole and feel for it.

Robert W. Jacobson and Paul Heikkila, Extension marine agents, and Kenneth S. Hilderbrand, Extension seafood technologist, Oregon State University. Members of the Oregon Department of Fish and Wildlife reviewed the manuscript and assisted in preparing the final draft for publication.