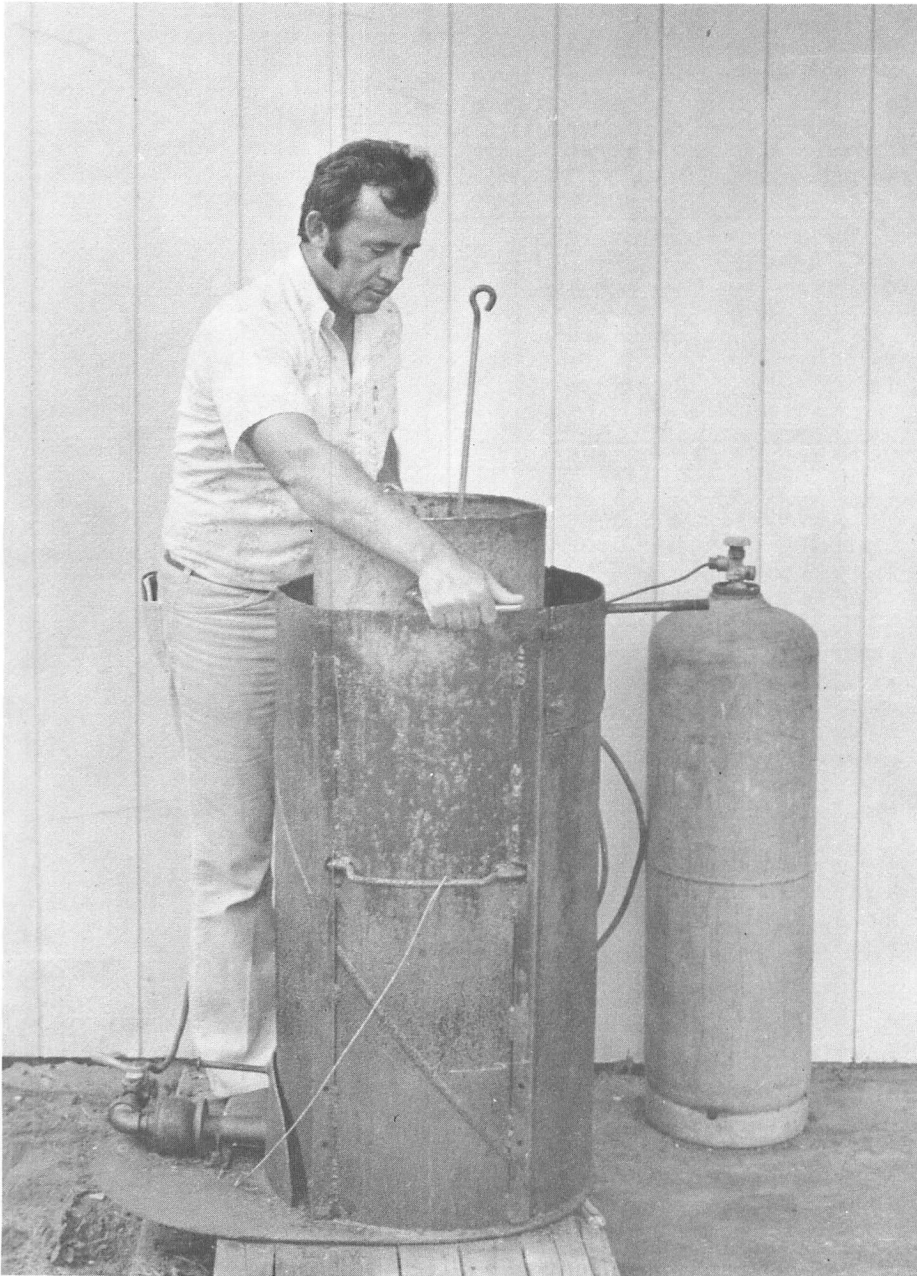


Building a small crab cooker for home use

by *Kenneth S. Hildebrand, Jr., Extension Seafood Technologist, Oregon State University*



Recreational crab fishing is a popular activity on estuaries in Oregon, Washington, and northern California. I have worked out what I believe is a fairly simple plan for building a home crab cooker. It uses strong materials and guards against a hot outer surface.

The comments that I have received indicate that others may find this plan useful, too. This isn't the only way to build a crab cooker, of course—but I've tested this one, and I know it works.

Some skill in acetylene or arc welding is called for. If you're not so skilled, find a welder who can handle the job for you.

Materials

I make my inner and outer shells (see page 3) from discarded 3/16-inch water main, 20 to 24 inches in diameter. Use your initiative: check your community for sources of low-cost or free materials that you could use to build your cooker.

My cooking pot is 14-inch-diameter, 3/16-inch stainless steel tubing (much easier to keep clean), with a bottom welded in place. I use a burner from a discarded propane furnace, about 150,000-Btu/hr capacity.

Those outer and inner shells provide insulating space that keeps dangerously high temperatures from reaching the outside of the outer shell. You could, of course, simply place a suitably sized cooker over a heat source—but be careful not to touch the outer surface, if you do! You could really burn your fingers.



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Construction

Weld the outer shell to a suitably sized base of steel plate. The inner shell is about 2 inches smaller in diameter; fit it with vertical angle iron spacers to maintain a gap between inner and outer shells.

Make the inner shell about 12 inches shorter than the outer shell, to make the cooking pot easier to remove for draining and cleaning. The removable side panel on the outer shell serves the same purpose.

Make the cooking pot of 3/16-inch stainless steel tubing. Weld a stainless steel bottom in place, using arc welding designed for this application. It should be 4 to 5 inches smaller in diameter than the inner shell. Support it 6 to 8 inches above the burner by 5/8-inch stainless steel rod handles that rest on the top of the outer shell.

Make the crab bailer of stainless steel rod, threaded and bolted or welded to a circular piece of heavy-gauge stainless steel with 1/2-inch perforations.

Most furnace burners are the low-pressure type and do not easily adjust for heat output. More expensive, but handier, are the high-pressure burners available from most propane suppliers. Most of these burners do not require regulators as low-pressure types do.

In windy locations, you may need to build a removable cover for the burner access hole. This will keep gusts of wind from snuffing out the flame (a special concern with low-pressure burners).

Operating the cooker

First, place the cooking pot inside the cooker. Fill the pot about half full of water. Light the burner with a cotton wick soaked in lighter fluid and attached to a long piece of wire.

Put the bailer in place. Add crabs after the water boils. Control the foaming of the boiling water by reducing burner heat or by adding small amounts of cold water from time to time.

When cooking time is completed, shut off the burner. Lift the crabs out with the bailer. *After the pot has cooled*, lift it out for cleaning (see "Cautions," below).

Cooking crab

Cook *cleaned* crab (sections) 12 to 15 minutes in water containing 3 to 5 ounces of salt per gallon. Cooking time starts *after* the water returns to a boil. (The pot should return to a boil within 5 to 10 minutes after you add the crabs—depending on the amount of crab, the size of the pot, and other variables.)

Cook *whole* crabs 20 to 22 minutes in water containing 6 to 10 ounces of salt per gallon. Whole cooked crabs will have more flavor than crabs cleaned before cooking, and they will keep longer in the refrigerator (see SG 30 under "For further information" for further details).

Cautions

1. The cooking pot in this crab cooker may weigh as much as 150 pounds when full. *Do not try to lift it out alone, while it is hot. Two people should remove it.*
2. Hot, salty water will kill grass and about anything else that grows. Dispose of your cook water in a safe manner.
3. *Light this cooker with caution*, as you would any gas-fired device. Apply the lighting wick *before* turning on the gas. *Turning on the gas first may cause an explosion capable of inflicting severe burns.* If the propane tank is not close enough for you to reach when you light the burner, add a shutoff valve close to the cooker.
4. When the cooker is in operation, be very careful when you work close to it. Flames from the burner can flare up with enough force to singe hair and skin.

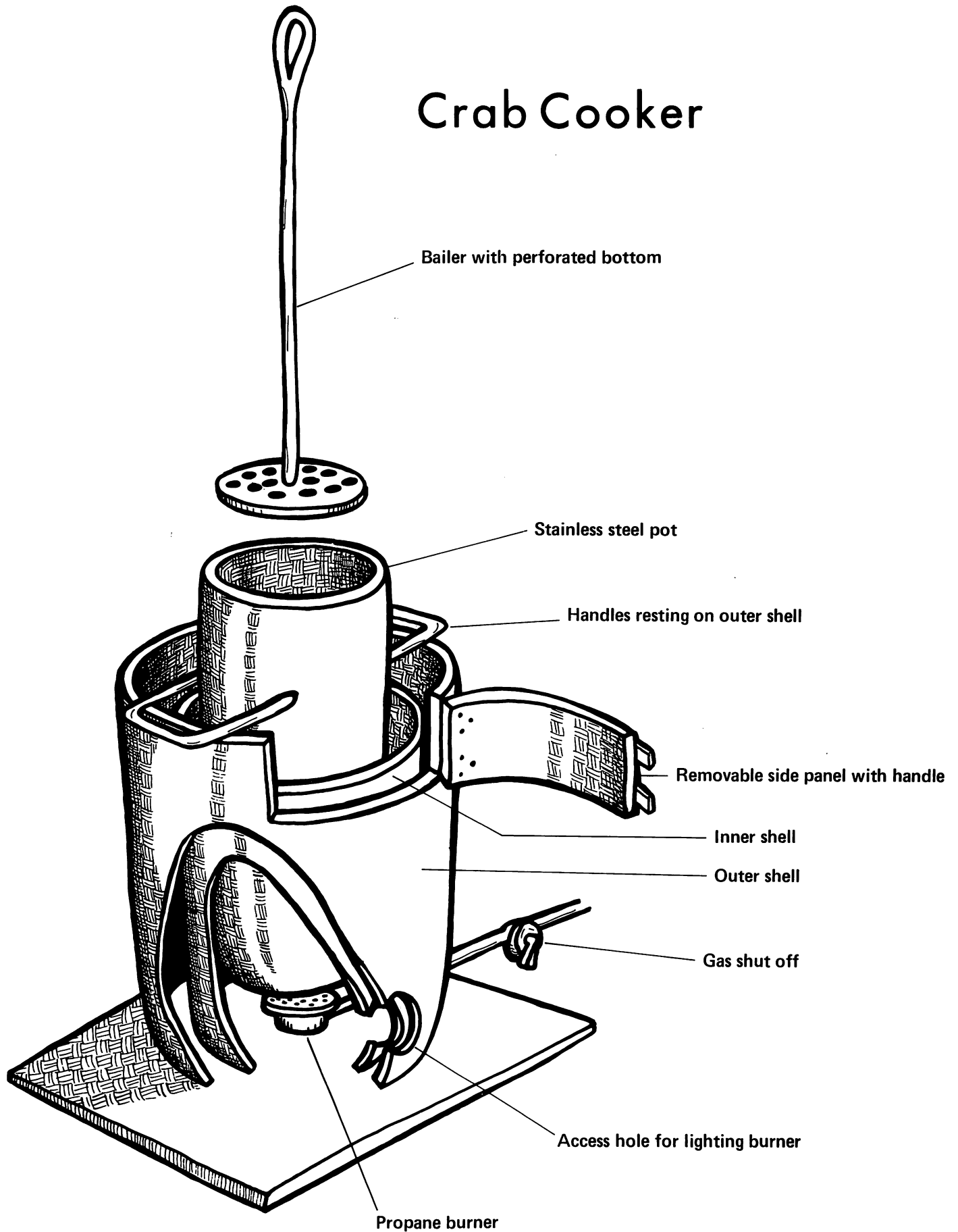
For further information

Babbitt, Jerry K., *Improving the Quality of Commercially Processed Dungeness Crab*, Oregon State University Extension Service, Sea Grant Marine Advisory Program Publication SG 65 (Corvallis, 1981).

Hilderbrand, Kenneth S., Jr., *Home Freezing of Seafood*, Oregon State University Extension Service, Sea Grant Marine Advisory Program Publication SG 7 (Corvallis, revised 1976).

Long, Jay B., *Catching, Cleaning, and Cooking Bay Crabs*, Oregon State University Extension Service, Sea Grant Marine Advisory Program Publication SG 30 (Corvallis, 1974).

Crab Cooker



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