Strategies for Producing Top Quality Finfish

Commercial fishermen harvest a variety of finfish from Louisiana and Gulf of Mexico waters; these fish are usually put on ice and not frozen. Improve the quality of your catch, and your bottom line, by following these onboard handling practices that capture a superior, “just-caught” flavor.

Harvest and Handling

The primary goal is to unload your catch so that the seafood is not just in good condition, but that it has many days of high quality shelf life remaining. After fish are caught, bacteria and chemical changes begin to break down the flesh of the fish. This process cannot be stopped, but it can be slowed by rapid chilling, careful handling to prevent physical damage and thorough cleaning to limit contamination.

Rough handling of fish can cause bruising, scale loss and worse, an entry point for bacteria that speeds up the decay process. Use care when landing and sorting to limit this physical damage. Avoid gaffing, throwing or using a fish pick. Sort the catch quickly, in the shade, to help keep fish from getting too hot.

Washing and Chilling

Rinse finfish thoroughly to remove dirt, slime and excess surface bacteria. Most fishermen wash down their fish, but the practice of putting fish in a basket, running a hose in and stepping on the fish to move them around damages the catch—it is an instant source of scale loss, bruising and abrasion. A better practice is to hose the fish down on the deck prior to sorting, and to use a small dip tank to wash the catch down when it’s in baskets ready for the hold.

Proper harvest and handling, plus rapid chilling and storage, are the best actions you can take to maintain the high quality of your catch.

Even using slush ice, there are risks to quality, including over-crowded washing bins and brine tanks and continued use of dirty wash or brine water.

The best temperature for a wash bin or brine tank is 32° to 38° F. When the wash or brine water becomes noticeably discolored, replace it with clean seawater and ice.

Storage

Pack fish neatly, belly-down on the bottom layer and belly-up thereafter. When possible, the ice should completely cover the fish at each level—use two pounds of ice to every one pound of fish.

All totes should be equipped with drainage holes, especially if stacked. Iced fish are best held at an air temperature of 32° to 40° F, where ice is able to melt and can trickle down through the stacked crates to wash fish and keep them moist.

While in storage, fish core temperature should be kept around 34° F to hold off spoilage and extend shelf life.

When putting fish in refrigeration, separate fish that are severely damaged and store them separately so as not to spread contamination and to make sure your buyers get only your top quality catch. Also, keep in mind that you shouldn’t straighten out fish that are still bent—this will lead to separation of the muscle bands in the flesh and later reduce the quality of the fillet.

Fish can also be frozen on board, but after freezing they should be dipped into cold water to form a glaze on the outside of the fish to protect against dehydration and freezer burn in the frozen storage hold and after unloading.

Stay up to date on the latest state finfish regulations at www.wlf.louisiana.gov/fishing/commercial-finfish

IF APPROPRIATE FOR YOUR FISHERY, fish should be gutted and gilled quickly. If done carefully, gutting removes a source of bacteria and enzymes. The bacteria must be contained, so do NOT cut through the belly wall into the meat. Afterward, pack ice firmly into the belly cavity before covering the fish with ice. It’s helpful to use clean gloves or thoroughly cleaned hands and a sanitized fillet knife. A bucket with a bleach sanitizing solution is a handy way of keeping bacteria down.

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This publication is a cooperative effort of the Louisiana Department of Wildlife & Fisheries and Louisiana Sea Grant College at LSU through the Louisiana Fisheries Forward program, which aims to advance Louisiana’s seafood industry. This is one of many fact sheets available free of charge at our website www.lafisheriesforward.org.