TIPS FOR MARKETING QUALITY SALMON HARVESTS DIRECT TO THE CUSTOMER

By Carrie Backman, Director, WSU Wahkiakum County, Girish Ganjyal, Food Processing Specialist, WSU Extension
Tips for Marketing Quality Salmon Harvests Direct to the Customer

Selling direct to the customer can be rewarding for a commercial salmon fisherman, with higher returns per pound and good relationships with appreciative customers. These relationships are strengthened by delivery of consistently high quality product. Consistently high quality product is dependent on (1) cleanliness and sanitation, (2) gentle handling, (3) safe handling for consumer food safety, (4) understanding necessary licenses and permits, and (5) timely, reliable delivery and good marketing.

Cleanliness and Sanitation

When marketing fish directly to the customer, it’s important that it smells like a fresh fish rather than a bad fish. Bacteria on scales and fish slime travel fast—from the boat, to the truck, to the person handling and marketing the fish. This can be avoided with regular cleaning and sanitation of the boat, trucks, totes, gear (including gloves and rain gear), and all other equipment in contact with fish. This also includes proper hygiene practices of the people handling the fish. Cleaning hands with unscented soapy water works well. All gear should also be rinsed with unscented soapy water to remove fish scales and slime and then sanitized with an unscented bleach mixture.

On non-porous surfaces, such as coolers, scales, and other materials in direct contact with fish, the bleach mixture should be made with a 12.5% sodium hypochlorite bleach product at 0.5 teaspoon per gallon, or 2 tablespoons per 10 gallons. The bleach solution should be left on the gear for about ten minutes, rinsed thoroughly with potable water, and then air dried. Be careful to use 12.5% unscented bleach products rather than 6.25% bleach products commonly used for laundry brightening.

For gloves or rain gear that go in the laundry, or for other tools that don’t come in direct contact with fish, the bleach concentration can be increased to 1 teaspoon per gallon or 4 tablespoons per 10 gallons. Regardless of concentration, no bleach should come in direct contact with fish.

Gentle Handling

Careful handling ensures delivery of bright, firm fish. Salmon can be graded down for excessive scale loss, bruising, or punctures. Meat bruising and separation happen from rough handling and create a mushy product. Whenever possible, both hands should be used to pick up the fish. Throwing fish or picking up the fish by the tail causes bruising and meat separation. Squeezing the fish, or dropping the fish from net to boat floor or from boat into empty totes, bruises and creates blood spots on the inside of the fish (Johnson 2007).

Decomposition of fish begins as soon as they are landed. Blood is a great medium for microbial growth and quickens decomposition. Bleeding the fish improves meat appearance and flavor and helps bring the temperature down quickly. Fish should be bled as soon as they are landed and while the heart is still pumping.

Gill cuts are a good option for bleeding salmon. This is done by slicing through the blood vessels that supply oxygen to the gills. Typically the gill cover is lifted and a knife is used to cut through the gill arch. Further, the knife is pierced through the gill membrane and the blood vessels at the top of the gills are severed by cutting towards the spine (Bell 2003). See Figure 1.

Gill cuts are a good option for bleeding salmon. This is done by slicing through the blood vessels that supply oxygen to the gills. Typically the gill cover is lifted and a knife is used to cut through the gill arch. Further, the knife is pierced through the gill membrane and the blood vessels at the top of the gills are severed by cutting towards the spine (Bell 2003). See Figure 1.

Figure 1. This spring Chinook salmon was bled by cutting the gill rakers.

Fish should be kept cold and covered to avoid sun or wind burn. In a pinch, reflective or light colored tarps can be used to cover fish in lockers, totes or holds for very short periods. The best solution is to keep ice in fish holds or have totes on board with ice or slush ice (a mix of ice and water) (CRITFC 2012).

Safe Handling for Consumer Food Safety

The ideal temperature for non-frozen fish is as near to 32°F from the time of landing as possible. Many of the common fish quality issues, such as meat separation, belly burn and blushing, can be lessened or prevented by proper icing.
For salmon fishermen, icing fish holds or totes can be the most accessible solution to keeping fish cold. Ice can be purchased in flakes or cubes. Flaked ice works best as cubes can leave dents on the fish. When icing fish lockers or totes, there should be eight to twelve inches of ice at the bottom and then ice shoveled over each layer of fish. Fish should not touch each other. If fish are gutted and gilled, the inside of the fish gut and gill cavities should be packed loosely with ice as well. Fish should be completely surrounded by ice whenever possible to avoid scale loss and to keep fish as cool as possible (CRITFC 2012). When iced properly, the ice will carry the weight of the fish above by forming an ice “cage” around each fish. See Figure 2.

Figure 2. Flaked ice is completely surrounding this Chinook salmon.

Slush ice is a good solution because it helps extend ice coverage, keeps the entire fish very cool when submerged, and maintains fish quality. To make slush ice, put two parts ice to one part cold water in a tote or fish hold. To be sure that the temperature stays as close to 32°F as possible, it is important to check that the ice is always present and is covering the surface of the slush. More ice should be added as it melts (Bell 2003). Ice should be from a safe, trusted source and handled like food.

Ice availability can be a major limiting factor to fishermen interested in direct marketing. Commercial ice companies sell flaked ice but require pickup at their plants, often many miles from fishing areas. Fish processors may distribute ice to fishermen who sell their fish to them but don’t usually make it available to those who do not fish for them. Some fishermen have created partnerships or cooperatives and pooled their money to invest in an ice machine. Large ice flakers capable of filling a few totes per day can cost several thousand dollars new but may be available for lease or purchased used.

Understanding Necessary Licenses and Permits

Fishermen in Washington State can purchase a direct retail endorsement from Washington Department of Fish and Wildlife to sell their catch as retail direct to the customer (WDFW 2015). They must have a commercial salmon or crab license to be eligible for this endorsement. Salmon must be sold uncut and unprocessed except for gutting and removal of the head. The endorsement requires fishermen to fulfill all related county health rules and requires a letter from the county health department that all county health requirements have been fulfilled and fees paid. A food and beverage service worker permit from the county health department is also required (Johnson 2007).

If fish is “cut, cleaned, frozen, smoked, cooked or otherwise prepared” for wholesale sales, then it is necessary to obtain a Washington State Department of Agriculture food processor license, as well as a wholesale dealer license from Washington Department of Fish and Wildlife (WSDA 2014).

A wholesale dealer license requires a surety bond to make certain that the fish receipts are reported in a timely and accurate manner. An annual scale inspection is also required by the WSDA, Division of Weights and Measures (Johnson 2007).

A WSDA food processor license is available by application to the WSDA Food Safety Program. It is available online at agr.wa.gov/FoodAnimal/FoodProcessors or by calling (360) 902-1876. The WSDA food processor license application includes a sanitation schedule, intended type of process, ingredient-processing information, a floor plan of where processing the product(s) will be done, proposed labeling, and water supply testing requirements. WSDA Food Safety Program inspectors will inspect the processing facility, food processing procedures, and product labeling for compliance with regulations. The WSDA food processor license fee is based on projected sales volume (WSDA 2014).

State and federal laws require that all raw fish processors assess their operations to identify any critical food safety hazards. Information about the food safety and safe handling of fresh and frozen fish can be obtained from the Food and Drug Administration website (USFDA 2011). Fishermen can find forms to create a sanitation plan and other records for permitting agencies and interested customers in Salmon Marketing: Tribal Fisher’s Handbook (CRITFC 2012).
If after conducting a hazard analysis, one or more critical food safety hazards are present, then processors are required to develop and implement a Hazard Analysis Critical Control Point (HACCP) Plan that is species and process specific. Records must be kept at each critical control point so inspectors can be certain the HACCP system is operating to provide safe food. WSDA offers many resources on creating a HACCP Plan on their website, and WSU Extension offers HACCP trainings and expertise through their Food Processing Extension and Research programs (WSU 2015).

**Timely Delivery and Marketing**

Timely delivery is essential to freshness and appeal to the customer. Indicators of freshness, such as clear eyes and red gills, change rapidly with holding time. To prevent holding fish for extended periods, fishermen should identify buyers for their product prior to openings.

Fishermen are increasingly using social media prior to and during harvest to advertise upcoming catches. Pictures of fresh, bright fish are worth a thousand words and help spread the word on upcoming availability. Strong customer relationships come from consistency and reliability. The old adage of “under promise and over deliver,” still rings true.

A marina or parking lot, along with the fisherman’s carefully iced totes and clean truck, make an easy delivery point for customers alerted via social media. Permissions from property owners and town or county business licenses are required, but otherwise these makeshift markets can be profitable and easily accessible to fishermen and customers.

Smart phones can help with on-the-go delivery arrangements via social media, as well as payment. With the addition of credit card processing applications, fishermen can take payment easily on the go. These services keep a small percentage of the sale but appeal to many customers who carry only credit and debit cards.

**Conclusion**

Delivering quality product direct to the customer can be rewarding, both financially and in developing new friendships with customers who appreciate the fish and the fisherman. While perhaps initially daunting, steps to successfully handling, icing, and delivering quality product can become habit and soon become second nature. These steps, along with strong relationships with licensing and inspecting agencies, set the path for long-term success.

**References**


