

6TH EDITION

Seafood Direct Marketing Manual

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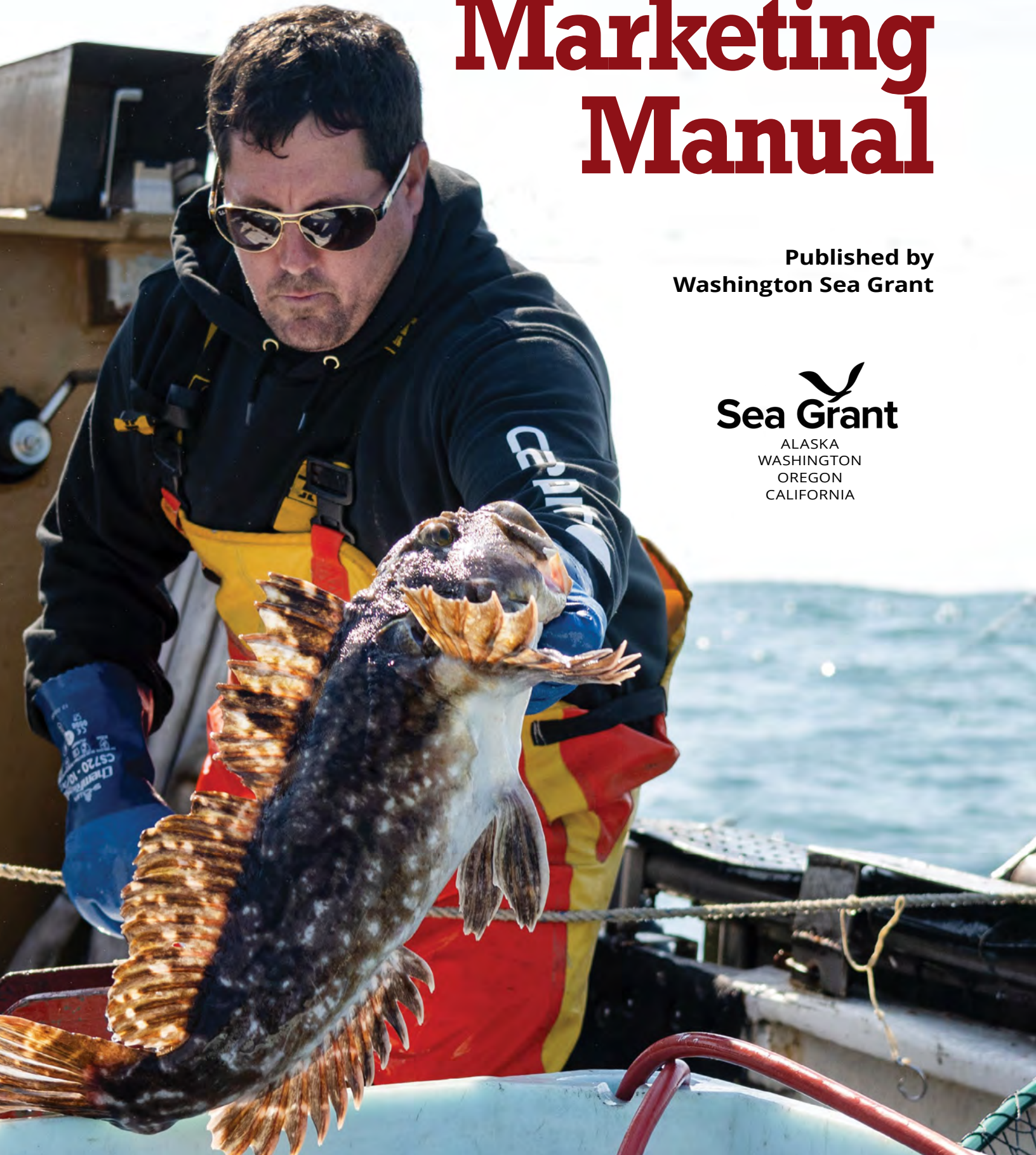




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6TH EDITION **Seafood Direct** **Marketing Manual**

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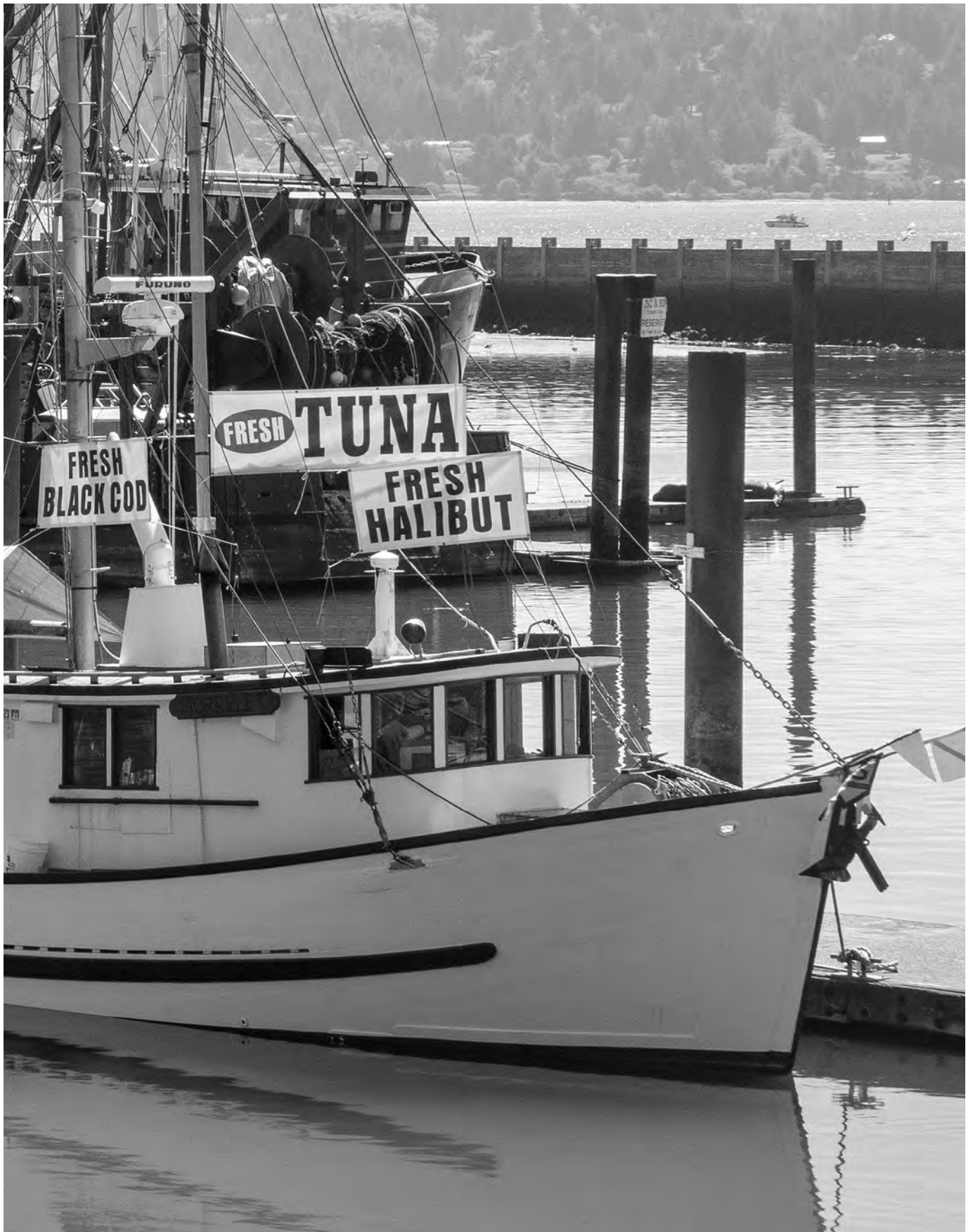


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FOREWORD

Welcome to the 6th edition of the Seafood Direct Marketing Manual, formerly known as the Fishermen's Direct Marketing Manual. Alaska Sea Grant's Terry Johnson envisioned and edited the 1st edition in 2003, and it has been used by commercial fishermen ever since. The goal is to help seafood harvesters think through the issues involved in selling their catch through a non-traditional distribution system—a practice commonly called direct marketing or alternative marketing.

More than 5,000 copies of this manual have been purchased or downloaded, and many readers have said they found it helpful. Some have suggested improvements, and we've attempted to incorporate those suggestions into this edition. We invited new contributors and continue to incorporate insights from working direct marketers. We expanded our scope to include new material on social media marketing and sales, packaging and shipping logistics, accounting, and quality handling. While in the past, this manual was directed toward fishermen, much of the content is also applicable for seafood marketing by mariculture operators.

In addition to the contributors listed on the title page, we offer our thanks to the authors who have contributed material for earlier editions of this manual, to the direct marketers who offered ideas that have been incorporated into the text, and to the reviewers of this edition including Heather Auld, John Burrows, Conor Downey, John and Nicole Glawson, Rick Goche, Patrick Roelle and Ashley Vellis. This revision has been a multi-state effort including staff and faculty from Alaska, Washington, Oregon, and California Sea Grants and led by Washington Sea Grant.

In that spirit of coast-wide collaboration, we also refer you to California Sea Grant's sister project, the online marketing manual "Market Your Catch" (<https://marketyourcatch.msi.ucsb.edu/>). It draws from and expands upon the information presented here in a user-friendly and visually appealing way.

—The 6th Edition Authors



REMEMBERING TERRY JOHNSON

After many years as a fisherman and freelance writer, Terry Johnson joined the Alaska Sea Grant Marine Advisory Program in 1991 as the agent for Bristol Bay. He worked for 26 years with Alaska Sea Grant and contributed 35 publications, many of which are still in wide circulation around Alaska. When he retired, he was honored as professor emeritus at the University of Alaska Fairbanks. Terry passed away in December 2022. We continue to be led by his words as we edit this edition: "It is just as valuable to prevent the wrong person from direct marketing as it is to assist the right person to begin."

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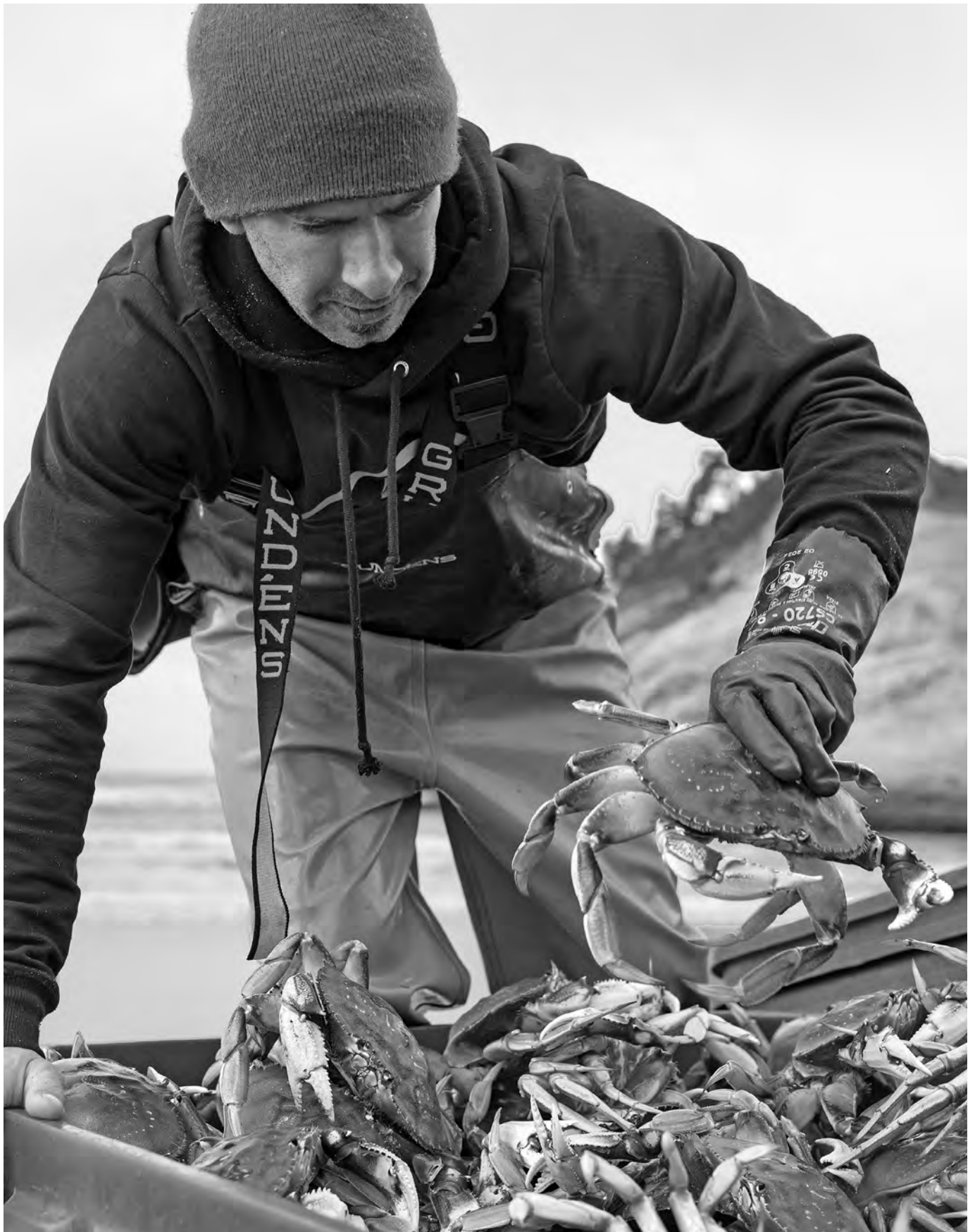


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Chapter 1

WHAT IS DIRECT MARKETING AND IS IT FOR ME?

The fishing and seafood industries are always changing. Sometimes, a low dock price encourages folks to try to bypass the “middleman,” increase value, and sell their catch directly to consumers. Entering the seafood business by direct marketing isn’t for everyone. Before making the leap, take a few moments to think through your motivations and situation.

WHAT IS DIRECT MARKETING?

Technology is making seafood harvesting, processing and distribution more efficient and more competitive.

Online purchasing and social media are changing the ways people find and purchase goods. Ocean climate change is altering patterns of resource abundance, distribution and behaviors.

People want to feel more of a connection with their food and know its source. Competition in the marketplace among food choices is increasing. Changes like these bring **threats and opportunities**. One way a seafood business can respond to both is to get more money for the product it sells.

“**Direct marketing**” means selling the catch at a point further up the distribution or “value-added” chain from the traditional destination—the local seafood processing plant.

A direct marketer can sell directly to the consumer, or to a buyer at any other level in the system. The direct marketer gets paid for the value of the raw product but also any value that is accrued as the product is processed, packaged, transported and sold to the final user or consumer.

Direct marketing has its own business practices, its own vocabulary (see Appendix J, Glossary of Seafood Business Terms), its own information sources and its own rewards. As a fisherman, if you make the decision to direct market, you are no longer in the fishing business; you’re in the seafood business.

This is often called “bypassing the middleman,” but really it is “**becoming the middleman.**” It means **doing two jobs**, incurring the expenses and taking the risks of all those middlemen and, hopefully, getting paid what

each of those links of the chain would otherwise reap individually. Trying to displace long term relationships between wholesalers, retailers and other vendors can be difficult and unlikely to be fruitful. Therefore, selling directly to the consumer is a better use of energy and is more likely to be successful for direct marketers, with the added benefit of providing the consumer with a more personal connection to their food.

WHAT A DIRECT MARKETER DOES

- Obtains licenses, permits and bonds and fills out reporting forms
- Develops product identification and specifications
- Develops branding
- Conducts market research and defines market niche including market forms and relative demand
- Specifies services provided and determines pricing
- Establishes a relationship with custom processor/co-packer, if using
- Harvests the seafood and/or purchases directly from other fishermen using appropriate licensing
- Prepares fish for sale or future processing on board the vessel which may include gilling, gutting, washing, and chilling or freezing catch
- Delivers the raw product to the custom processor/co-packer
- Pays the custom processor/co-packer within pre-established terms
- Procures storage space for the finished product awaiting sales
- Designs, places and purchases advertising
- Sells the product(s)
- Collects payment

WHAT A DIRECT MARKETER DOES (CONTINUED)

- Purchases boxes, gel ice, banding and labels, and assembles the shipping box units
- Pre-chills, packages, boxes, bands, labels and prepares product for shipping
- Arranges shipping and delivery
- Delivers product to shipper
- Pays shipper within pre-arranged terms
- Follows up to assure product was delivered in good order
- Handles problems and complaints, if any
- Completes bookkeeping, pays taxes and bills, and submits reports

MARKETING VS. SELLING

The words “marketing” and “selling” are sometimes used interchangeably, but marketing involves much more than making a sale. It may include formally or informally doing:

- Product development, including competitive analysis of other products identical or very similar to yours, and product-specific market research
- Promotion, including story-telling, advertising and sharing content on social media
- Placement, including a situation analysis of the intended market or market segment and targeted demographic research
- Pricing, including determining an appropriate value for your product

The sales component of marketing may include making calls and emails, taking orders, billing and more.

STATE-SPECIFIC REGULATIONS AND PERMITS

Alaska, Washington, Oregon and California issue several kinds of direct marketing permits, each with specific provisions and limitations. See Appendices for a complete list of seafood business categories and a summary of requirements pertinent to Alaska (Appendix E), Washington (Appendix F), Oregon (Appendix G) and California (Appendix H) regulations. Keep in mind that states regulate seafood processing and sales differently, and local counties or municipalities may impose their own regulations.

COMMON MARKETS FOR FISH AND SEAFOOD PRODUCTS

- Off-the-boat or dockside sales direct to consumers
- Farmers markets
- Community supported fisheries (CSF)
- Restaurant supported fisheries (RSF)
- Online sales
- Food clubs, buying clubs
- Boat to institution (e.g. schools, prisons) sales
- Boat to food service (restaurants) or retail market sales
- Seafood brokers, distributors or wholesalers

PRODUCTS

When contemplating product forms, direct marketers should consider perishability, shelf life, shipping costs, cultural familiarity, visual appeal, consumer convenience and price.

(**Note:** this manual does not directly address seafood processing. For information on how to set up a small fish processing plant see the publication *Village Fish Processing Plant: Yes or No?* <https://seagrant.uaf.edu/bookstore/pubs/M-89.html>)

Products offered by direct marketers include:

- | | |
|-----------------|---|
| • Whole dressed | • Smoked and cured (head on or head off) (flavored or spiced) |
| • Fillets | |
| • Steaks | • Lox |
| • Portions | • Fish heads or bones |
| • Burgers | • Bait |
| • Ground | • Roe |
| • Canned | • Samplers |
| • Jerky | • Dog snacks (straight or flavored) |
| • Skin | |

Generally, anything done to a raw fish beyond gilling, gutting, sliming or chilling constitutes processing. Freezing is considered processing by some regulating agencies. Refer to Appendix E, F, G or H for specific definitions of “processing” for Alaska, Washington, Oregon and California. **Processing requires an approved, inspected facility, additional permits, and specified procedures including HACCP certification.** Though some direct marketers conduct value-added processing aboard their permitted vessels, inspection standards for processing may be difficult, expensive, or even impossible to meet on board a smaller vessel or at a remote location. Direct marketers may also process product at their own permitted facility or contract an already licensed facility to process their product for them, a practice commonly referred to as custom processing or co-packing. Some direct marketers purchase processed products from a licensed facility for resale.

IS DIRECT MARKETING FOR ME?

To determine if direct marketing is the right business decision for you, ask yourself the following questions and complete the SWOT analysis on page 5.

Do the following benefits of direct marketing match my motivations?

- Receive a higher price-per-pound than local processors usually pay
- Opportunity to sell lesser known species and excess product that wholesale buyers do not buy
- Have control over your level of fishing effort or schedule
- Customers provide feedback about products, potentially leading to ideas for new products
- Opportunities to connect and develop relationships with the consumer of your product
- Educate the public and chefs about the availability of local seafood to build markets for lesser known species
- Diversifies markets where you can sell your harvest, reducing market risk
- Control of where and when product is sold
- Provides a disconnect from the volatile export market
- Grows the reputation and understanding of small-boat fishermen and their products
- Extend your working season
- Exercise your creativity
- Provide employment for friends or family members

Am I willing to tackle additional direct marketing challenges?

- Will take time away from fishing
- Requires greater time commitment, both during the season and the rest of the year
- Increases responsibility for timeliness to maintain quality
- May not be possible to provide desired products or consumer demands
- May put relationship with traditional buyers at risk
- Results in less flexibility to take advantage of good fishing days due to scheduled marketing activities
- Increases need for refrigeration and other product handling facilities
- May require willing, skilled and affordable help

Am I willing to incur the opportunity costs and/or additional costs associated with direct marketing?

- The value of the catch if it had been sold to your usual processor
- Shrinkage, roe value, lost opportunity to sell lower grade or undesirable species catch

- Time spent delivering or handling product that could have been spent harvesting
- Time spent delivering or handling product that could have been used for maintenance or rest
- Additional fuel expense if traveling to various ports
- Costs of additional equipment and supplies required for the operation

SWOT ANALYSIS

A SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis is a way to balance the advantages you have against the disadvantages to inform a decision about whether to proceed with starting a business. Strengths and weaknesses are internal to you and your situation, while opportunities and threats are external. Answer the questions below and enter them into the box to create your own SWOT analysis on page 5:

STRENGTHS OR WEAKNESSES:

Am I personally suited to and capable of running a direct marketing business?

- Have I proven myself to be a successful seafood harvester?
- Am I an entrepreneur?
- Am I comfortable with risk?
- Am I a people person?
- Do I like being a salesperson, on the phone or in person? Do I enjoy meeting and talking to people?
- Can I live with delayed payment for my work and products?
- Am I organized and detail oriented?
- Am I good at bookkeeping and financial management?
- Do I deal calmly with problems and with difficult people?
- How assertive am I at making people pay what they owe me or do what they have agreed to do?
- Am I more quality or volume oriented?
- Can I take on additional time and work demands?
- Can I stay with a set of tasks every week, year after year, or do I get bored and need change?
- Am I willing and physically able to do the extra work and commit the additional time, or do I prefer to put the boat away and forget about fish at the end of the day or the season?
- Am I willing to sacrifice in the short term for greater rewards and potential long-term security?
- Am I able to be brutally honest with myself about the true costs of operation?
- Do I have logistics skills so that I can get my product to the buyers in excellent condition?

OPPORTUNITIES OR THREATS

Do I have the resources to create a successful direct marketing business?

- Can I wait weeks after delivery or months after the season to get paid?
- Is my family supportive and can they make changes so I can spend time on this business?
- Does my fishery resource have timing that permits taking time to handle the catch and meet delivery schedules? Is the volume adequate to meet the volume and frequency demands of the market?
- Is my species mix and intrinsic quality of catch appropriate for my market?
- Do I have a market for the roe (if a salmon fishery) and for catch my customers don't want due to species, size or condition?
- Is my boat suitable with adequate space to properly handle the product?
- Do I have storage and staging area and structures for equipment and supplies?
- Does my operation require vehicles and other pertinent equipment for product handling and transportation?
- Do I need refrigeration, ice or chilling capacity?
- Will I rely on regular, reliable, affordable air cargo and/or road transportation?
- Do I have adequate capital cash or credit to carry the business in case customers don't pay or, for some other reason, the business isn't immediately profitable?

Take a moment to think about how you can build upon your strengths and opportunities and brainstorm ways you can overcome your weaknesses and threats. For example, if you are a people person, can you add an in-person component to your sales strategy? If bookkeeping is not your strength, can you hire an accountant or take a course on digital bookkeeping software?

Keep in mind that your direct marketing business becomes successful only when you have enough additional fishing net income to justify the added time, work and risk—as well as the happy customers and satisfaction—of establishing and running your own seafood business.

A DIRECT MARKETING STARTUP CHECKLIST

You understand what direct marketing is and have decided that you have what it takes. Here are ten steps toward starting your business.

1. Decide what **product or product forms** you want to sell. If you plan to use any custom processing (that is, sell any product form except chilled, headed and gutted), identify a processor with needed capabilities and get firm prices for the processing and handling services they provide.
2. Decide on a **business structure**—corporation, limited liability corporation (LLC), partnership or sole proprietorship. Note, your business structure has implications for liability protection if selling your catch.
3. Decide **where or in which parts of the country** you will focus your marketing.
4. Apply for the **permits and licenses** you require from your state (see Appendices E, F, G and H).
5. Register with the **Food and Drug Administration (FDA)** if shipping out of state and apply for permits for the states and locales where you plan to sell. If a HACCP plan is required, sign up for a HACCP class (see Appendix B).
6. Determine your **modes of transport**. Get schedules, rates and at least tentative assurance from shippers that they will accommodate you on your schedule. Locate refrigerated or frozen storage facilities that can hold the product.
7. Design your **packaging and labeling**. Make sure they are compatible with the shipper's requirements and with regulatory authorities in states where you will be selling your product (see Chapter 9).
8. Get **insurance** for your marketing operation, including product liability.
9. Develop a **marketing plan** (see Chapters 6 and 7).
10. Draft a simple **business plan** (see Chapter 2 and Appendix I).

Keep in mind that there may be considerable lead time for some of these steps, particularly business incorporation, getting any required certification such as HACCP, and getting permits and licenses. Start the process early.

S trengths	W eaknesses
O pportunities	T hreats

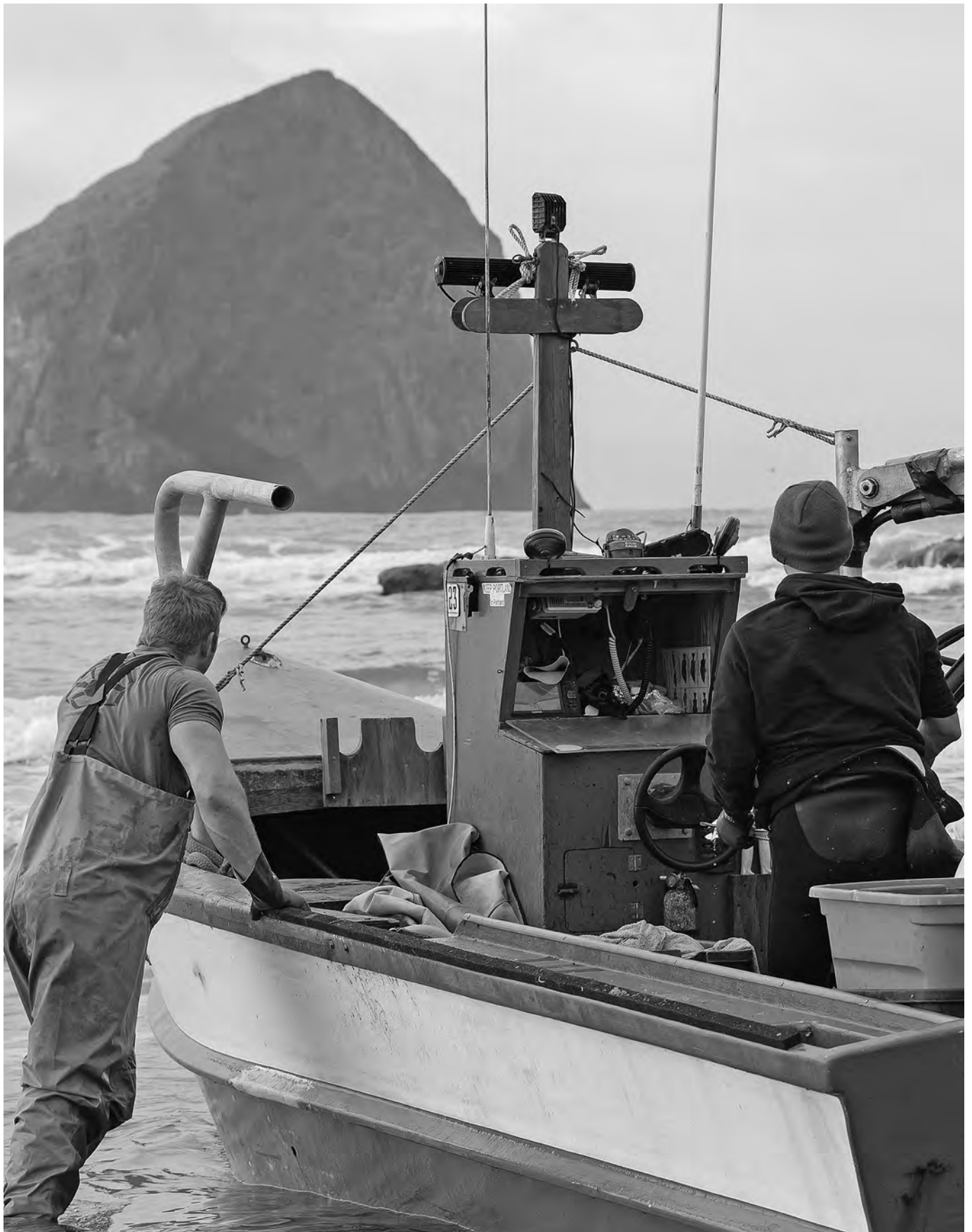


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Chapter 2

BUSINESS PLANNING TIPS*

No one plans to fail, but many fail to plan. Nearly 75 percent of all startup businesses fold within their first five years, and seafood businesses are no exception.

A detailed **business plan** is a blueprint of your objectives, the steps in meeting those objectives and the necessary financial requirements for both a startup and an existing business. You could hire someone to write your plan, but you are the person best qualified to answer the questions raised in the business planning process. The plan should be reviewed annually and updated as changes occur.

Several federal and state agencies, as well as private consultants, can help develop a business plan. **Appendix I of this document is a generic business plan outline** you can adapt to your operation.

TIPS FOR SUCCESSFUL DIRECT MARKETING BUSINESS PLANNING

Consult with a variety of marketing authorities. Read books and articles. Successful direct marketers commonly share practical information with others in the business. Go to a nonprofit business development assistance program for free or low-cost advice.

Do market research and understand your potential customers. When possible, talk to prospective buyers and consumers in person.

Define a target consumer population, both geographically and demographically. Develop a list of products in seasonal demand in your target population.

Locate buyers who are your philosophical allies. Seek customers who understand the limitations of a small operator. These customers will be willing to work with you and pay more for premium quality fish. Favor buyers who honor good product appearance, nutritional benefits, and sustainable resource and fishing culture.

Differentiate your product from the competition. Why should a potential customer buy from you rather than from someone else? Do you have better quality, a better price, superior service?

Try to **maintain a relationship with your current processor**, who may be willing to help you or at least take you back if things don't work out. You may be able to avoid burning bridges by continuing to deliver part of your catch to your processors, so long as they don't think you're high-grading. Some processors may be willing to custom process for you or sell back your own catch.

Carefully assess your costs. Profit is only what's left after paying all your costs. Remember permits, bonding, taxes, packaging, transportation, insurance, cold storage, distribution and additional boat operating costs. Home phone bills, fuel and wear-and-tear on your truck, special clothing and equipment are all costs of doing business and should be included when projecting profitability.

Diversify your markets. Try not to send all of your product to a single buyer or market area. Develop markets in several broad regions. As prices in one market area begin to decline because of oversupply, promote your products in the next.

Plan for growth of your business and for your clients' growth.

OPERATING TIPS

Prepare to change the way you fish. You may have to sacrifice volume to meet the needs of your customers. You may have to shift the species or change your timing for catching fish to optimize quality and meet buyer demands. Your objective is not to fill your boat, it's to meet your customers' needs.

Expect to become more self-sufficient. If you stop delivering to a packer, you may lose access to fuel, groceries, ice, use of a port engineer, dock space, boat storage and other company services.

Separate the fishing and marketing functions. It is difficult to run catching and sales operations at the same time. Many rely on a spouse, partner or employee to do the marketing, or they use a broker or sales agent. Some have formed small marketing cooperatives to ensure enough volume to support hiring a marketing person (see Chapter 8).

Take good care of your catch at every step of the process. Quality cannot be overemphasized. No one can improve your fish, so it's up to you to sustain the quality it had when it came out of the water. Bled and chilled is virtually assumed.

Establish communication. Buyers want you in regular communication with them, and they want to be able to reach you if need be. Provide cell or satellite phone numbers as well as fax and email. Some buyers will want

to talk to you daily while you are fishing; if yours are expecting to hear from you, be sure to call or be available to take their call.

Respond quickly to customer schedules and specifications. As the saying goes: if you are going to keep 'em, you will need to please 'em. Maintain proper attitude.

Remember to be civil, no matter what kind of day you are having. Project a positive, optimistic image to your customers regardless of what is currently happening.

Be consistent in product quality, delivery timing and price.

Keep it simple. Project complexity increases the risk and makes business capital more difficult to acquire.

Realize your time is not unlimited. Without experience, there is no way to accurately anticipate and estimate the added time commitments of processing, sales, fulfillment, etc. Weigh these factors into your analysis of whether direct marketing is for you.

POTENTIAL CAUSES OF FAILURE

Inadequate business planning. a business plan needs to be more than a brief diagram scribbled on a napkin.

Inadequate capitalization. a business needs enough capital to purchase equipment, supplies, and raw material. It also needs enough capital to pay wages and other operating costs for one or more years until sufficient cash flow is established.

Failing to cope with new realities. Changing market realities such as lower wholesale prices or higher ex-vessel prices can radically alter profitability.

Accounting failures. Proper accounting practices are necessary both to meet legal requirements and for successful business management.

Underestimation of personal energy required. a lot of time is required to deal with customers, air carriers, seafood regulators and others. Consider hiring competent assistants on the beach. Beware of creeping exhaustion.

Insufficient credit control. If possible, do not sell your product on credit. Arrange to take credit cards or irrevocable letters of credit if customers do not have cash. If credit is the only option, use a credit service to assess the credit worthiness of your would-be customer. Remember, it's not a sale until the check clears.

Ineffective cost control. Learn to control costs in all parts of your operation.

Excessive risk. Investigate all areas of risk in the business and find ways to minimize risk.

THINGS TO KEEP IN MIND ABOUT DIRECT MARKETING

Buyers get frustrated working with fishermen. They say that fishermen too often do not understand the seafood business. Study the wholesalers, retailers and food-service businesses to understand their needs.

Retailers and food-service businesses purchase from multiple sources. Though they may buy most of their fish from a volume distributor to minimize risk and keep the price down, they may still have a place for your offerings.

You have to do everything yourself. The tasks and risks that someone else previously assumed are now yours alone. Many of them are very different from fishing and take a great deal of time and energy to address.

You can't be in two places at once. Unless you're selling right off the boat, you probably will have to hire or contract someone to meet the plane or truck at the other end and deliver your product to the storage facility or buyer. Nobody (other than possibly a relative) does anything for free. You will need to get the tariff (rate) sheets for the companies whose services you plan to use, calculate all the costs involved, and contract with them well in advance.

You have to get rid of it all. You have to sell all of your catch, including any inferior species, any #2s and #3s, as well as any quantity in excess of what your buyers want. It is illegal to discard commercially caught fish even if you can't find a buyer. You may have to sell the excess or less desirable catch at a price below what it costs to box and ship them.

Develop backup market options. If a buyer refuses a shipment, cancels an order, or reneges on a price agreement, or you simply find that you've caught more than expected, have backup markets that are just a phone call away. Relationships with brokers and traders come in handy at times like these. Some people just put the catch in a freezer and hope they can unload it later.

Middlemen and end-users normally do not buy roe. Part of the value of your salmon is in the roe. However, you may find it difficult to sell and may have to market it separately (see Appendix C).

There will be no retros. Salmon fishermen often get a 10 to 30 percent "bump" after the season. When you direct market, what you get is what you get.

If you succeed, expect to attract competitors. Nothing is static in the business and an exclusive arrangement with a buyer can vanish if another supplier comes along with better quality or a lower price. Develop a strategy for dealing with competition bent on taking your market share.

Chapter 3

THE SEAFOOD DISTRIBUTION SYSTEM*

The distribution system in the United States is complex, with many different entities taking cuts of the product's retail value. In some other countries it's even more complex. There are reasons that the seafood industry trades fish the way it does. The system ensures adequate supply, minimizes waste, ensures convenience and accountability, and minimizes risk at each level of the chain.

THE AMERICAN SEAFOOD DISTRIBUTION CHAIN

The word “chain” is commonly used to describe the seafood distribution system, though “web” is more accurate because there are multiple routes that a fish or fish product can take from boat to consumer. For simplicity, “chain” is used in this manual.

After a fish comes out of the water, it goes to the **processor**, who sorts, weighs, grades and washes the fish; does primary processing such as heading and gutting; and either preserves the product by freezing or canning or retards spoilage by chilling. The processor may also do secondary processing such as steaking, filleting or portioning. Some processors also do additional value-added processing such as smoking, battering and breading, vacuum packaging and gift boxing.

Processors may sell directly to restaurants, customers, or distributors (described later in this section). In some instances, primary processors sell to specialty or custom processors who do the value-added processing. In any case, processors take a raw material—fish—and convert it into products that can be used by the consumer at home, the supermarket seafood department, the chef in a restaurant or someone else.

Most processors have their own in-house sales staff who are paid to make the calls, fill the orders and ensure that the company's entire pack is sold at the best possible price. Other processors use the services of a **broker**, an individual or firm that sells products on a commission. a broker may work out of a small office with little more than a telephone, fax machine and computer and spends most of the day on the phone. Brokers normally work specific geographical territories such as the Upper Midwest or New England (see Chapter 13).

Sometimes the first buyer to take product from a broker is a **trader**. The trader's role is to match the flow of product to the demand by “sourcing” from numerous suppliers and trying to supply each customer what they need. They may sell to wholesalers (described below) or directly to retail and food-service outlets.

Distributors, also called wholesalers, deliver product to retail or food-service users. Distributors may have fleets of refrigerated trucks that do door-to-door delivery of products to restaurants and supermarkets or to central warehouses owned by or serving those restaurants and supermarkets.

Most restaurants use relatively small quantities of fish, no more than a few hundred pounds a week of all species, and individual supermarkets don't sell much more than that. The wholesaler's job is to provide a slow, steady flow of product to meet the buyers' daily needs.

In most cases, distributors service the geographic regions where they are located. They buy from processors, from customer processors, from fishermen and even from one another. They prefer to buy small quantities to minimize risk and resell quickly. The distributor's stock-in-trade is its relationship with each customer, who must trust the distributor to supply consistent quality and in volumes meeting customer needs and nothing more. Distributors buy in large volume so they can add small profit margins to their costs and still sell to their customers at competitive prices.

Small distributors, also known as **jobbers**, run one or two trucks. Large companies, some with annual sales of tens of millions of dollars, are called **broadline distributors**, and they distribute many kinds of products besides seafood, including meats and fresh produce. They may have fleets of refrigerated trucks. Some distributors

Chapter 4

ACCOUNTING FOR YOUR FISH BUSINESS

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Accounting is a strategic resource that enables an owner(s) to manage a small business effectively. A good accounting system performs two essential functions. It provides valuable information on the performance of a business, hence the nickname, “the language of business.” Timely feedback is crucial for identifying and correcting problems or inefficiencies that may arise. Second, accounting also assists in meeting the numerous federal, state and local tax reporting requirements. Whether it concerns taxes on profits, payroll taxes or sales taxes collected on receipts, accounting is key to meeting these obligations. However, the benefits of accounting are contingent on the system being set up correctly and kept current.

There have been significant advances in small business accounting apps (software) since the 5th edition of the Direct Marketing Manual. Foremost among these are cloud-based applications, with data integration. Having cloud-based access makes these apps or programs infinitely scalable, and accessible anywhere using just a cell phone. Integration of accounting data with supporting applications allows for the recording of sales, payments, and purchases once (one touch) from anywhere you have internet access. These apps include credit card processing for payments, payroll, inventory management as well as other useful features like taking a picture of a receipt or invoice in real time for record retention. This integration allows for one-time entry into the accounting app, which means you have current information at your disposal as well as avoiding having to enter transactions at the end of the day, week or month previous systems required.

BASIC ACCOUNTING REPORTS

Let's start by reviewing the Three Primary Statements:

The **income statement**, or profit and loss statement, provides information about sales and expenses of a business. It's a scorecard for the business, wherein sales are compared or “matched” to their related expenses or product costs, and other operating expenses incurred are presented. Sales information should be identified by source (such as major products and services) and

matched with the related product costs. This difference between them is called gross profit or margin.

Margins represent the profit available to cover other operating costs and, hopefully, business profit. Other operating costs not directly associated with products include advertising, insurance, depreciation on equipment and buildings, and interest paid.

1. The **income statement** covers a discrete period, usually a month, quarter or year. This is somewhat arbitrary, because the operating cycle varies from one business to another. By using reasonable estimates, you can produce reliable accounting reports. The income statement is like a scorecard, it provides information on the profits of a business and the source or sources of these profits.
2. The **balance sheet** of a business, or statement of financial position, has a different role. It presents a longer-term financial picture of a business. It lists the assets (resources), liabilities or amounts owed to outsiders and the owner's net worth at a point in time, usually month-end or year-end.

Assets are simply resources controlled by the business that provide current or future benefits in terms of cash flow. Liabilities, or obligations of the business, represent unpaid bills and borrowings. These usually consist of short-term trade credit or amounts owed to suppliers, as well as long-term financing arrangements—for example, a mortgage or line of credit.

Owner's equity, or net worth, represents the owner's residual claim to the business, above and beyond the amounts owed. This amount usually represents the owner's initial investment plus the undistributed profits of the business. The balance sheet is a snapshot of a financial picture, or health, of a business at a given point in time.

3. The **cash flow statement** reports on the cash flows of a business segregated into three categories: operations, investing and financing. This statement provides useful information about where a business gets money and where it spends it. Like the income statement, it reports on activities over a period of time. For example, if the business borrowed money to buy new equipment, both of these transactions would be shown on the cash flow statement—the former as a source, the latter as a use.

Financial statements work together as a package, with each contributing something the others can't. Only by examining each and integrating the information can the reader understand the how and why.

Underlying these reports is a key assumption that the activities of the business can be separated from those of the owners. In other words, the financial statements represent the activities, resources and obligations of just the business. This can be a challenge in small operations, where the owner's funds are sometimes commingled, or mixed, with those of the business. Great pains must be taken to separate the activities of the business, because mixing them can blur the picture of the business presented in financial statements.

COMPUTERIZED ACCOUNTING SYSTEMS

Only the smallest businesses are better off using a manual accounting system. There are many excellent, inexpensive accounting apps available for small to medium size businesses. Freshbooks, Sage, and QuickBooks are just a few. They are designed to not require specialized accounting training. Your choice of a particular accounting app should be based on availability and local support. QuickBooks is probably the best-supported and most widely used accounting program in the world, but there are many quality competitors. As mentioned, these accounting apps are commonly available as cloud-based programs. Beside the advantages mentioned previously, another is that everything is backed up automatically to the software developer's secure internet-based system.

GETTING STARTED

Most instruction manuals and third-party guides for these programs recommend you round up the following basic information before you start installing the program on your computer:

- Copy of recent business tax return, if available
- Federal tax identification number
- Owner names and addresses
- Employee information if you have them.
- Banking information, including routing & account numbers, current balances
- List of products and prices
- Items you commonly buy for processing or shipping
- Contact information on major customers and suppliers

All the programs use a "setup" or conversion that prompts you for information about your company. This routine can take from one to four hours or more, depending on how extensive you want to set everything up initially. It will ask you questions about your company's products and whether you make things, perform services or do both. The purpose of this questioning is to assist the program in setting up a chart of accounts for you. It is good to have everything organized and accessible before starting.

The **chart of accounts** is the key part of collecting and categorizing transactions, enabling you to produce useful reports. You can make changes to it later but it is much faster and easier if you can do it right the first time. The initial chart should include accounts for each of your products, both sales and their costs, and major items you purchase for processing, packaging and shipping.

For many folks, the first big barrier to setting up their system is establishing a starting point. To get the most benefit from your new accounting system, it is best to start recording transactions at the beginning of the current year, even if that started 11 months ago. This means that you'll have to input sales and payments going back to the beginning of the year. But it will be worth it, because you'll be able to use all of your program's capabilities and reports.

At some point during setup, the program will ask you for information on your **accounts receivable and payables**, or money owed to and by your business. It is best to skip entering any existing balances for your customers or suppliers. Enter the underlying transactions instead. Most small businesses are on a cash basis, which means it doesn't count as income or expense for tax purposes until the money changes hands. It is easier to skip entering balances at the start of the year or whenever you are setting up your accounting program. Instead, record the amounts owed or due when you actually receive or pay money, then record the appropriate income or expense.

Another thing that is good to do at this point is to map or link your chart of accounts to your federal tax forms. This will save you time later because you'll already have everything organized for preparing your taxes. If you've been in business a few years the best way to do this is to reference your previous year's tax form to see how accounts were classified and combined. If this is a new business then decide how you will report your income and expense on your tax form and assign specific accounts to the form lines.

Sooner or later, everyone has a problem or question and if you know someone who is using one of these programs, it is likely that they can help you. Most accounting programs have a helpline and user groups that can provide good assistance and answer questions that come up. Also if you use an accountant to prepare your taxes ask them what accounting apps they are familiar with.

ADDING OR CHANGING ACCOUNTS

No matter how carefully and completely you answered the setup's questions, at some point you will need to add or create additional accounts. This might occur due to oversight during setup, expansion or growth of the business. To do this, reference your program's specific instructions on how to add new accounts.

Tip: Consider setting up major or header accounts for income and expenses, and some assets. Doing this will allow you to add many detailed accounts under a major account. For example, you might use several vendors to ship your product to customers, creating a major shipping account allows you to put all the various shippers under a single "shipping expense" in your reports while retaining the ability to have detailed information for each shipper when needed. This detailed information is helpful when you have to reconcile to one of the shipper's statements or investigate a charge. Setting up major account groups will allow you to produce better reports, using either the summary for a group of accounts or for individual accounts. Here's another example, if you sell several varieties of smoked fish, you can create a smoked fish sales account and then create sub-accounts for each type or variety of smoked fish you sell. Sales of each product will be kept separately in individual accounts so that you can generate reports for each product line and analyze the success of your efforts to market and manage each. Most users will find setting up accounts to track separate product lines and expenses invaluable for accessing the performance of each line. Bank accounts are another example of using header accounts. Setup a "cash" account and then create accounts under this for each bank account you have.

USING YOUR ACCOUNTING SYSTEM

Most accounting apps user interfaces are very intuitive and organized around common business activities such as banking, sales/customers, suppliers/vendors and reports. This makes it easy to perform common tasks such as invoicing customers, purchasing materials and supplies, paying bills and generating reports.

As mentioned earlier one of the big advances in accounting apps is that you can enter transactions at the "Point of Sale". This applies for your sales as well as when you purchase items. You can enter the transaction from your smart phone as the transaction occurs using the online interface, take a picture of the sales or purchase invoice and upload it for recording keeping requirements. Most often the transaction will be recorded to the accounts you have specified in advance based on the type of transaction (sale or purchase), but you can also easily enter transactions that are less frequent.

As an example, to pay a supplier's bill, all you have to do is open the banking menu and then click on "pay bills or write checks." The program will prompt you for the necessary information, like the supplier's name, invoice, and then record the transaction by creating the necessary debts and credits to the appropriate accounts.



Photo Courtesy of Alaska Seafood

Since accounting apps differ slightly from one another it is difficult to go into all the details for these features here. Tip: Most popular account apps have **third-party user manuals** that help you understand your app more fully, and are a good investment for getting the most out of your accounting app. Many of these are better written and easier to follow than the user documentation provided with the accounting app.

Most apps have features that allow you to manage/ project cash flows by tracking outstanding sales invoices and purchase payables. Budgets are another tool to help manage your business. Finally, most programs interface with online banking from your financial institution, which makes bank reconciliations easy. Reconciling your bank account can be quick and effortless if your bank provides an interface for your accounting system. This allows your accounting app to determine what checks and deposits have posted to your bank account and determines what checks and deposits are outstanding automatically. This used to be the most time-consuming aspect of completing a bank reconciliation.

PAYROLL TASKS

Employee payroll reporting requirements are often very demanding, and late reports and tax deposits carry stiff penalties. It is essential if you have employees, that payroll expenses and obligations are computed and recorded accurately, and that all necessary reports are assembled, paid and transmitted on time. Accounting apps can help by providing supplemental support for an additional cost. Many small businesses, on the other hand, outsource these tasks to their accountant.

Most accounting apps offer variable payroll assistance for users. At one end of the scale, the business can provide a listing of employees and their hours and the software computes payroll costs, sends electronic checks for printing, maintains payroll information, makes the payroll deposits and files the required reports with both federal and state agencies. At the other end of the scale, a business submits the employee time and the program electronically sends back the amounts for checks and payroll deposits. The user writes their own checks makes deposits, and files their own reports.

BACKING UP AND SECURING FILES

Whether you select a desktop or cloud-based accounting app it is vitally important to protect your accounting system and its data files from misuse or loss. This requires some careful planning and adherence to limit system access to only those people who have a need for it, and to only those areas they need access to perform specific functions or tasks (like payroll, or paying bills). Most accounting apps support limiting user access to

specific tasks, or even to just viewing certain information. Invest sometime to set-up and use these features to prevent unauthorized changes and transactions.

Backing up your accounting data is crucially important if you select a desktop-based app/system. The frequency of your backup schedule depends on how often you update, or add data your system. At a minimum implement a weekly backup schedule, say on Friday, where a complete copy of your files is written to a portable memory device, such as a jump drive, or to cloud-based storage. If you use a physical device, it should be stored off-site until needed for making a new backup. If you use a cloud-based accounting app backing up your data is done automatically by the software provider.

DETERMINING PRODUCTION COSTS

The importance of determining your product costs can't be understated. If you don't know what it costs you to produce an item you don't know how much you should be charging or profit you will make from selling them, and you won't be able to evaluate offers to buy your product at reduced prices.

Products have two cost components: Costs you can directly trace into a specific product or item, and the fixed or overhead type costs that you incur whether you produce one unit or thousands of them. It is a good exercise to sort your expenses into these two groups so that you can determine your product cost accurately. We'll illustrate how to do this using an example. But first let's think about what distinguishes these costs. Direct or product costs are costs that can be traced directly into the product and vary directly with the volume (output) of goods produced. These would include for example: packaging, additional processing, like filleting or dividing up into portions, and of course the raw product-fish. Fixed costs do not vary with production levels, you incur them whether you make no items or hundreds. An important consideration to keep in mind is that these fixed costs have some production range where they are fixed. In other words, you incur them up to a certain production level and then beyond this level they too will increase. For example, consider a warehouse where all your production and processing occur. At some production level the warehouse will be too small and additional, bigger facilities will be required. But the key factor for determining whether a cost is a variable product or fixed cost is how it varies over the planned production level.

This distinction is important because you need to know what the cost is for producing an item that you want sell. Over the long run you have to cover all of your costs but in the short run you have to at least cover your direct product costs. If a customer offered to purchase a large order at a substantial discount knowing your direct and

indirect product costs will be very helpful in evaluating the offer. Never, never offer to sell a product below your direct product costs because accepting and filling the order will cost you money, you would be better off passing on the offer.

CLASSIFYING COSTS

How to classifying and determining your product and fixed costs can be a daunting task but it doesn't have to be. Kind in mind that you only really need to classify your major or large costs of production. Minor items won't impact your profits significantly so you can ignore them to keep things tractable and simple. Start with your products and make a list of what goes into each one. Things like the raw fish portion, labor for extra processing, special equipment required, packaging, licensing, testing and the like. For each product cost listing sort the costs into how they behave over your planned production volume. Put costs that vary directly with production into the product cost column, costs that vary little or not at all in the fixed (overhead) cost column. Some costs may vary over different output (volumes) but are largely fixed over planned production levels. For example, say you have to hire someone to move product around during production. If you operate just one shift per day then the labor associated with this mover person is fixed, but if you add another shift then this mover labor cost increases by another person. Put these latter costs into the fixed or overhead column. By adding up these costs you have determined your product and fixed (overhead) costs for each product you produce.

Notes

BREAK-EVEN ANALYSIS

A big advantage of determining your costs of production is that you can use this information to answer some important questions. For example, it is good to determine how much production (volume) is required to cover all your costs, and to earn a profit. We call this break-even analysis. It is simple to perform once you have determined your costs of production. Let's work through an example to illustrate how this analysis is performed. Assume that your direct product costs are \$6.50 per pound, and your total fixed or overhead costs are \$85,000. If you sell your product for \$15.00 per pound your profit (contribution margin) per pound of product sold is \$8.50. We can now answer the question: How many pounds of product must be sold to cover all my costs? Using the equation below gives the answer: 10,000 pounds.

$$\begin{aligned} & \text{(contribution margin)} \\ \text{Total fixed (overhead) costs} / (\text{selling price} - \text{product} \\ & \text{costs}) = \text{Break-even sales volume} \\ \$85,000 / (\$15.00 - \$6.50) = 10,000 \text{ pounds of product} \end{aligned}$$

You can easily change the equation to provide the sales volume required to produce a profit of \$30,000 by adding this amount to the total fixed costs side of the equation. Doing this gives the answer 13,530. Break-even analysis is a powerful tool for solving business problems such as should I take a special order at a reduced price? Should I process my product more? Can I make a profit at a certain volume? These are all important answers for being successful.



Photo Courtesy of Oregon Sea Grant

Chapter 5

CONSIDERING QUALITY

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There are two ways to view seafood quality: intrinsic characteristics and extrinsic characteristics. Intrinsic characteristics are those related to the natural state of the fish when it leaves the water. They are for the most part biologically determined. Extrinsic characteristics are those that affect the appearance after the fish has been caught, such as bruising, scale loss, gaping, softness and general degradation. It is important to remember that quality can only be lost and cannot be improved after harvest. However, proper handling can safeguard against the loss of quality until the seafood reaches the ultimate consumers.

HOW QUALITY IS LOST

Fish and shellfish tissues are delicate and easily degraded. Bacteria and catabolic enzymes in fish guts and muscles start breaking the fish down as soon as it dies. Poor handling, warm temperatures or slow transit decrease the value of fish by diminishing its appearance, taste, odor, texture and shelf life.

In finfish, quality loss begins before a fish is landed. For example, a salmon trapped in a gillnet gets squeezed and abraded by the mesh. Further damage can occur as the fish is brought aboard the boat, removed from the gear and stored in the hold. Common mistakes include lifting or pulling the fish by the tail and dropping or squeezing the fish, all of which result in bruises and blood spots in the meat. Bruises can occur in dead fish as well as live ones. Rough handling very often causes internal defects that are not visible until the product reaches the customer. Some fishermen put their live catch directly into receivers with adequate room or live wells with or without aeration to help them revive after being caught and to maintain the overall health, strength and appearance of fish that may be scratched up, have loss of slime coat, or are weak due to the stressors of being caught.

Maintaining high-quality shellfish and crustaceans requires keeping them alive until shucking or processing or live sale. After processing it is important to keep all seafood cold and moving through the supply chain as fast as possible.

Bacteria are present everywhere, including on and inside seafood. When a fish dies, bacteria start digesting the flesh and producing chemicals that destroy the texture and create odors. The higher the temperature, the faster the bacteria multiply and the faster the product spoils.

Fish have **enzymes** in their guts and their muscles. Catabolic enzymes degrade the flesh from the inside out, a condition known as “belly burn.” Like bacterial action, enzyme activity also increases with temperature.

When flesh is exposed to air it undergoes **dehydration** and **oxidation**. Dehydration toughens and discolors the meat. Oxidation is caused by the chemical reaction of fish oils with oxygen and causes unpleasant odors and flavors. Dehydration and oxidation are prevented through good temperature control, proper packaging, and rapid transit of a fish.

Shelf life is a measure of how long seafood can remain wholesome and flavorful from its capture to consumption. The longer the shelf life the higher the value. Delay or deterioration on the production end (catching, holding, processing, storing, shipping or receiving) decreases the shelf life and product value. The shelf life of non-frozen high-fat fish (e.g., salmon, herring, sablefish) can be as long as 10 days; the shelf life of non-frozen, low-fat fish (e.g., halibut, cod, pollock, rockfish) can be as long as 14 days. But these maximums assume immediate and constant chilling (32°F) and perfect handling. Actual shelf life is normally less, so you must do everything you can to avoid reducing this time.

Temperature loggers, also called Time, Temperature Indicators or TTIs, are available and are an invaluable tool in monitoring the quality of your catch. TTIs track temperature over time and come in models that collect the data for later reference or allow for real-time monitoring from an onboard computer. The goal for quality handling is to get fish cold fast and keep it cold. TTIs allow monitoring of the chilling method and provide a tool for continuous improvement.

EXTENDING SHELF LIFE AND PRESERVING QUALITY

The four-part mantra, “Keep it clean, keep it cold, keep it moving, handle it gently,” applies to all three links of the seafood chain:

- **Pre-process.** Complete a thorough sanitation process of the boat and processing area. Handle the fish gently on the way to processing. This includes minimizing drops, avoiding round hauling, and being mindful of fish lying on the deck. Chill fish well and promptly. Prevent contamination of any kind.
- **In-process.** Process promptly but never while the fish are still in rigor. Hold the unprocessed fish and the processed products at 32°F. Keep holding times to a minimum. The ultimate goal is for fish to be processed pre-rigor so that the flesh goes through the process of rigor while frozen.
- **Post-process.** Package the products properly, with careful attention to insulation and chilling. Use plenty of gel ice packs if shipping fresh. Ship the products as soon as possible. Monitor the shipments until they reach the customers.

Your job as a seafood provider does not end until the products arrive at the customer's location and the customer accepts the shipment.

IMPORTANT

The ideal temperature for non-frozen fish is 32°F from the time of capture. Any temperature higher than 32°F will accelerate the deterioration of your products.

PRACTICES, GRADES, SPECIFICATIONS

A good primer on seafood quality is John Doyle's *Care and Handling of Salmon: The Key to Quality*, available from Alaska Sea Grant and from the Alaska Seafood Marketing Institute (ASMI). It presents more details on the causes of quality problems and offers excellent recommendations on practices for chilling, on-board handling, cleaning and sanitation. Other manuals listed at the end of this chapter cover the handling of salmon, whitefish, crab and more.

ASMI and the Sea Grant Marine Advisory Program have produced several publications on handling, chilling, packaging, shipping, butchering and filleting salmon, halibut and other species. See the list at the end of this chapter.

You can inform your customers about your quality practices to assure them that you are doing your best to produce and deliver top-quality seafood products. In fact, that's one important tool in your marketing toolbox.

Grades

The seafood industry uses a system of grades to indicate the quality of a product. They're based on many factors and indicate freshness and handling. Fish, regardless of final product form, are assigned numbers with the best being a number one and the worst a number three. Number threes are generally not fit for human consumption or are not presentable enough to be sold without further processing. For example, a fillet could have a seal bite on one side making it unusable as a fillet but could be portioned to remove the seal bite and sold as a salmon portion. Below is a list of some of the characteristics that are used to determine the quality grade of a whole fish or headed and gutted fillets (H&G). There are additional factors to take into account when dealing with fillets or portions:

- Handling - bled vs. un-bled
- Odor - ranging from "fresh" to "slight, not offensive"
- Eyes - ranging from "bright, clear" to "milky or cloudy"
- Gills - ranging from "bright red" to "pink to buff"
- Skin - clarity of slime, net marks, scars, scale loss, red belly, damage to fins and tail
- Belly Cavity - internal color, degree of belly burn, thoroughness of cleaning

ASMI's Seafood Technical Program has produced several other useful tools for grading your products:

- Salmon Skin Color Guides for sockeye, coho, chum and pink salmon
- Salmon Meat Color Guides for sockeye, coho, chum and pink salmon
- Premium Quality Specifications for king crab, opillio crab, bairdi crab, Dungeness crab and frozen whitefish fillets

Specifications

Specifications are developed for each product and product form being sold. Grades are standard measurements that can be applied to all products and accepted by all customers, and are included as a characteristic in the specification. Specifications include:

- Product - common and Latin name
- Product Form - headed and gutted, fillets, fletches, steaks, loins, etc.

- Item Number - Many marketers have specific item numbers for individual products to aid in inventory.
- Size - usually a weight range of the product
- Skin - on or off
- Bones - in or out
- Trim - for example, J cut, HGT(Head, Gut and Tail), fillet trim style
- Packing - specific box or carton including size in inches, plastic sleeves, liners specifying thickness in mil
- Net weight
- Gross weight
- Tie Hi - how many containers per pallet for the finished height of a pallet of the product.
- Quantity - piece count per package in master carton
- Shipping - expected FOB

Customers will expect to receive a specification regarding the standard handling of your product. If a customer requests something outside of your standard specification, you may write one specifically for them, making sure that it is signed off by the customer and the processor.

When writing a specification, keep it simple, clear and easy to read. Provide specifications to each person in the distribution chain, from you and your crew to the customers and their staff. Each customer will expect to receive products that conform to the agreed specification.

Grades and specifications are critical to the success of your direct marketing business. They are the basis for the sale of your products, and by minimizing mistakes and misunderstandings they allow clear communication between sellers and buyers. Without grades and clearly understood and mutually accepted specifications, you risk the loss of future sales through customer uncertainty.



Photo Courtesy of Alaska Seafood

CUSTOMER ASSURANCE

The marketplace values and rewards reliable, consistent quality. There are several ways in which you can assure your customers of the consistent quality of your products:

- Handling Practices—Inform your customers about the quality handling practices that you follow, on the boat, during processing and during shipment.
- Product Grades—Ensure that your products are of the grade that your customer expects. Inform your customers about the grading system you use.
- Product Specifications—Clearly understand and consistently deliver products that meet the customers' specifications.
- Customer audits—Some customers require that they see your operation in person before agreeing to purchase your product.
- Third-Party Verification—Some customers prefer that their seafood is produced in inspected facilities, and/or that the products meet their grades and specifications before shipment. This type of service is available through NOAA Fisheries and private sector seafood inspectors. Some buyers may want chain-of-custody or responsible fisheries management certification available from the fisheries certifying body.

Seafood will continue to be valued for its intrinsic qualities: taste, appearance, nutrition and purity. As you produce and market your products, please keep in mind that your competitors have gained market share by delivering products of consistently high quality. Quality has never been more important.

FURTHER INFORMATION ON SEAFOOD QUALITY PRACTICES, GRADES AND SPECIFICATIONS

NOAA Fisheries Office of International Affairs and Seafood Inspection

<https://www.fisheries.noaa.gov/insight/noaas-seafood-inspection-program>

Alaska Seafood Marketing Institute

Seafood Technical Program
311 North Franklin St, Suite 200
Juneau, Alaska 99801
907-465-5560
<https://www.AlaskaSeafood.org>

The following publications for seafood quality practices are available at <https://www.alaskaseafood.org>:

Alaska Salmon Quality Specifications and Grades: Fresh and Frozen

<https://www.alaskaseafood.org/wp-content/uploads/Alaska-Salmon-Quality-Specifications-and-Grades1.pdf>

Recommended Salmon Quality Guidelines for Fishing, Tendering and Processing Operation

<https://www.alaskaseafood.org/wp-content/uploads/Recommended-Salmon-Quality-Guidelines-For-Fishing-Tendering-and-Processing.pdf>

Whitefish Premium Quality Specifications

https://www.wildalaskaseafood.co.uk/wp-content/uploads/2020/12/23-017-Whitefish-Guide_final.pdf

Recommended Whitefish Quality Guidelines for Fishing and Processing Operations

<https://www.alaskaseafood.org/resource/recommended-whitefish-quality-guidelines-for-fishing-processing-operations/>

Dungeness Crab Quality Specifications

<https://www.alaskaseafood.org/wp-content/uploads/DungenessCrabQualitySpecs.pdf>

King Crab Premium Quality Specifications

<https://www.alaskaseafood.org/wp-content/uploads/KingCrabPremiumQualitySpecs.pdf>

Snow Crab Premium Quality Specifications

<https://www.alaskaseafood.org/wp-content/uploads/SnowCrabPremiumQualitySpecs.pdf>

Alaska Seafood Quality and Handling Training Program

<https://www.alaskaseafood.org/foodservice/training-techniques/>

The Alaska Shipper's Guide to Seafood Quality

<https://www.alaskaseafood.org/resource/handle-with-care-the-alaska-shippers-guide-to-seafood-quality/>

A Foodservice Guide to Seafood Quality: Basic tips on handling fresh and frozen Alaska Seafood

<https://www.alaskaseafood.org/wp-content/uploads/A-Foodservice-Guide-To-Seafood-Quality.pdf>

Alaska Sea Grant Marine Advisory Program

Chris Sannito, Seafood Quality Specialist
118 Trident Way
Kodiak, AK 99615
907-539-2012
csannito@alaska.edu

The following publications for handling North Pacific fish are available at <https://seagrant.uaf.edu/bookstore/pubs>. Please keep in mind some guides may be outdated, though information may remain valuable.

Care and Handling of Salmon: The Key to Quality by John Doyle

Handbook on White Fish Handling Aboard Fishing Vessels by John Doyle and Charles Jensen

Quality Handling of Hook-Caught Rockfish by Brian Paust and John Svensson

SAFETY AND SANITATION REQUIREMENTS

HACCP REQUIREMENTS

A federal regulation designed to assure safety of seafood produced in or imported into the United States became effective December 18, 1997. The regulation is 21 CFR Parts 123 and 124 Procedures for the Safe and Sanitary Processing and Importing of Fish and Fishery Products; Final Rule.

This regulation was established by the U.S. Food and Drug Administration (FDA) and requires use of the Hazard Analysis and Critical Control Point (HACCP) system for all seafood processing operations. Many states, including Alaska, Washington and Oregon, have adopted HACCP as part of their state regulations.

There is a training requirement in the federal regulation. Persons who develop HACCP plans, reassess or modify HACCP plans, and perform HACCP record reviews must be trained. Training can be accomplished by completing a course that uses a curriculum recognized as adequate by the FDA or by gaining qualification through job experience.

A certificate of completion of this course is given by the Association of Food and Drug Officials (AFDO). For a listing of courses taught in the United States, go to the University of California Davis website at <https://cpe.ucdavis.edu/course/basic-haccp-food-safety-system>.

The University of Alaska Marine Advisory Program teaches the three-day course developed by the Seafood HACCP Alliance. HACCP courses in Alaska can be found on the Alaska Sea Grant website at <https://alaskaseagrant.org>. For more information on these courses, contact Chis Sannito in the Kodiak Marine Advisory Program office, 907-359-2012, csannito@alaska.edu.

In Washington, contact Kirsten Ringen, Northwest Food Processors Association, at 503-327-2200, 503-327-2220, 530-300-1600 or kirsten@nwfpa.org for training, education or answers to HACCP and food sanitation questions. The association website is <https://www.nwfpa.org>.

The first two days of the three-day Seafood HACCP Alliance course can be taken online through Cornell University. To access, go to <http://seafoodhaccp.cornell.edu> to review course structure and requirements. Completion of the online course does not qualify for the AFDO certificate. To obtain this certificate, you need to attend the third day of the three-day course or a Segment Two One-Day Training Course.

SANITATION REQUIREMENTS

The federal regulation that requires the implementation of HACCP to ensure seafood safety also requires that each processor have and implement a written sanitation standard operating procedure (SSOP) detailing how the following eight sanitation conditions and practices will be met and monitored:

1. Safety of the water that comes into contact with food or food contact surfaces, or is used in the manufacture of ice
2. Condition and cleanliness of food contact surfaces, including utensils, gloves and outer garments
3. Prevention of cross-contamination from unsanitary objects to food, food packaging material and other food contact surfaces, including utensils, gloves and outer garments, and from raw product to cooked product
4. Maintenance of hand washing, hand sanitizing and toilet facilities
5. Protection of food, food packaging material, and food contact surfaces from adulteration with lubricants, fuel, pesticides, cleaning compounds, sanitizing agents, condensate and other chemical, physical and biological contaminants
6. Proper labeling, storage and use of toxic compounds
7. Control of employee health conditions that could result in the microbiological contamination of food, food packaging materials and food contact surfaces
8. Exclusion of pests from the food plant

There is no training requirement for the sanitation monitoring activities mandated by the federal regulation. However, the Seafood HACCP Alliance has developed a one-day course to assist seafood processors in developing the SSOP and setting up the monitoring program.

See Appendix B for tips on compliance with HACCP guidelines.



Photo Courtesy of Alaska Seafood



Photo Courtesy of Alaska Seafood

Chapter 6

MARKETING YOUR PRODUCT: FINDING CUSTOMERS AND MORE

How you find and attract customers depends on what you plan to sell and where you expect to sell it. Your business will benefit from having a marketing plan, and this chapter will help you think through what it should cover.

Marketing is a suite of activities intended to create and identify customers, articulate their needs, develop a plan for meeting them, and promote the product in a way that satisfies them. This definition by Peter Drucker (an Austrian American management consultant, educator, and author) often gets the point across well: “[Marketing] is the whole business seen from the point of view of the final result, that is, from the customer’s point of view... Business success is not determined by the producer but by the customer.”

Here are some marketing concepts:

- **Market research** tells you who buys your products and why, who buys competing products and why, what consumers are looking for and how they make their buying decisions, how much they will pay, and so on.
- **Product placement** is informed by market research and will help you determine which means are most appropriate for getting your product in front of the right audience. Understanding who your customers are will help inform this. You may want to sell directly to the consumer, or you may want to sell to food services or regional distributors.
- **Consumer demographics** describe who buys what kind of seafood, where they live, how much they make and spend, etc.
- **Competitive analysis** involves understanding who the competition is, what they offer, why people go to them and what you can do to get some of that business. Remember, competition can be healthy and helps sellers create a diverse market.

- **Pricing** is deciding how much to charge for your product. You can either decide how much you want to profit per unit (such as a pound of fish or a bag of oysters) and then add your costs, or you can find out what others are charging for similar products and then charge the same, more, or less, depending on your reasoning.
- **Digital marketing** is the practice of using online communication via digital channels such as a website or social media to reach audiences in the hopes of turning them into customers.

CRATING A MARKETING PLAN

A marketing plan helps you identify the customers you are choosing to focus on, decide how to reach and sell to your customers, set your marketing goals, and much more. It helps you define and position your business, think about your competition and how to distinguish your product from theirs, and set your pricing. To get to know your customers, consider trying to answer these questions: Who is your target market? What is their price range? What lifestyle habits do they exhibit? Knowing the attributes of your customer base will help you determine pricing.

A marketing plan can also house your timeline for reaching your marketing goals and helps you to develop an image or identity that guides your operations. It need not be an elaborate written document, but it should be at least a paragraph or two in your overall business plan.

DEFINING YOUR PRODUCT

Attracting customers requires clearly defining your product. To do that, you need to know what the market wants. **Market research** can involve sophisticated socioeconomic analysis or simply making a few calls and asking people what they want. Simple or complex, it's essential that you do it. You might have the right species and right grade, but you also need portions that are the right size and available in the right quantities for delivery at the right frequency. In other words, you need to determine that what the customers want is what you can provide.

Direct marketers often have little choice in the species, grade, form and quantity they can supply, because those factors largely are determined by nature. Custom processing, preserving, packaging and storage may afford some control over their offerings. For example, a fish that may be impossible to sell headed and gutted (H&G) might go like hotcakes as a smoked-side or an entrée in a microwavable retort pouch.

Sometimes the easiest and most profitable thing to do with a fish is sell it as is. This would mean pulling the catch one-by-one out of the iced hold or bringing product in from your farm and selling it directly to customers at the dock or harbor. But catcher–seller direct sales only work where fishermen and growers have access to suitable dock sites, large enough consumer populations and the time to do it.

PROMOTION

If you plan to sell directly to customers you need to advertise or promote your product. Retail means selling directly to customers. This excludes selling to restaurants and/or grocers. **Promotion** is communicating a specific cause, service, or product to enhance reputation, awareness, or usage. Simply put, it is what you do to get your business name and product before potential customers. It can include publicity, public relations, or social media. Any sales to any part of the supply chain require some form of promotion or communication that you have a product to sell and information about why your product is better than your competitors'.

When creating promotional content, ask yourself the following questions:

- **Who do you want to communicate with?** Understand who your current customers are. Who would you like to market your business to? Keep existing customers before making new ones.
- **Where do you want to deliver your communication from?** Create an online presence, such as a website, to give customers information about the business. Engage with social media to broaden your audience.
- **What do you want to communicate to potential customers?** Having an online presence will build trust and develop relationships with customers. It will also increase product visibility and allow you to sell your product to a diverse audience.
 - › Share personal elements of your operation
 - › Share the “why” early and often
 - › Encourage people to take action with each post - this is known as a “call to action”
 - › Share the problems or issues your business solves or what benefits you provide
- **Why should customers prioritize your product over others?** Why should the customer choose to purchase seafood from you? What makes your seafood business unique and worthwhile?
- **How can you create meaningful and effective online marketing content?** Begin your content with the conclusion or what you want people to know. Flip the typical paragraph structure upside down to read: conclusion, content, and then introduce your product. Have a clear brand “why” statement.
- **When and how often should you communicate online with potential customers?** It depends. Consider your own capacity and post only as often as you can. a good general rule of thumb is to try to post multiple times per week on social media and email once per week or month. The frequency of communication can change depending on your business's busy and slow seasons.
 - › For social media posts—use the Insights section on your business page on Facebook or Instagram and post when the bulk of your followers are online and interacting with posts.

Here are some tried and true tools and activities for promotion:

- Press releases to newspapers, magazines, radio stations; sponsorship of community events, public radio, conservation groups, etc.
- Posting fliers at local places of business
- Promotional items such as pens, mugs or clothing with your company logo
- Public speaking engagements
- Exhibiting in trade shows
- Participating in local events (can include samples, giveaways or sweepstakes)
- Brochures, stickers, magnets, business cards and rack cards
- Magnetic signs on the sides of your vehicle
- Displaying a sign board on the roadside or dock near your operation or sales location
- Cooking demonstrations
- Partnering with brands or influencers
- Posting content on social media
- Being a guest on a podcast show
- Writing blog posts
- Sending newsletters by email

Other low-cost tools and activities for promotion:

- Recruit friends, relatives and community connections to spread the word
- Join your local Chamber of Commerce
- Meet with your community's Visitor Center
- Guest-write or ghost-write newspaper or magazine food columns or articles
- The VIP concept: offer price discounts, special offers or gifts with your logo
- Ask repeat customer to post how they prepare your product with pictures on social media, then repost on your site
- Ask chefs to post pictures of product delivery and the dishes they prepare on social media, then repost on your site
- Ask customers to share their favorite way to prepare your product with new customers; this helps to educate them on what they can do with the product when they get home
- Give repeat customers free samples to try new species
- Let loyal customers pre-order and select the most premium pieces to pick up at a prearranged time
- Send bulk-mail fliers to people in the industry
- Offer referral discounts or other awards to people who refer customers to you

Also consider:

Trade shows, farmers/fishermen's markets and food & wine show venues to support the promotion of seafood products and cultivate relationships with potential customers and partners in person.

Food trade shows allow businesses of all sizes to promote their product, learn of market trends and interact with future customers face to face. Research local events in your region or larger national and international ones to determine the best fit for your business based on attendance, location, costs, and potential ROI.

SOCIAL MEDIA AS A TOOL

Social media can be a marketing and promotional tool to drive engagement and promote a business or product. It can also be a networking tool for building and maintaining relationships with customers by continuously expanding and interacting with people online (customers, family, friends and others). Content to consider posting may include fishing or farming techniques, seafood recipes, stories highlighting the people behind the business, how-to videos, simple questions that present a call to action, videos showing a day-in-the-life of your business, etc. Whatever you post, ensure the content is relevant to your customers' interests. Presumably, customers are following your seafood business because they want to be a part of it!

Social media platforms are high-commitment, low-cost marketing channels for many businesses. Social media can reach an international audience with the only cost being your time resources. Most leading social media platforms give businesses free access for promotion. Much content can be developed in a low-cost way; however, you may wish to invest in high-quality production tools, such as a camera, tripod and digital editing software. There are also apps you can use to maintain consistency across your content by creating content ahead of time and scheduling posts ahead of time. These options may help you manage your time.

Table 1 below shows the major social media platforms available in the United States along with their total worldwide monthly users. Each platform requires different types of materials and engagement, because each one caters to a different audience. Facebook is currently the largest social media platform in the United States and offers the option to purchase promotional ad

placement within its text, picture, and video experiences. YouTube is a platform to share videos (with captions) that can be educational or informative. Instagram is a good platform for pictures and short videos or "Reels" (with captions). Make sure you enable captions manually. TikTok is a social network platform to share primarily short videos (with captions) and now pictures as well. Snapchat claims self-deleting "posts" as its primary purpose. Snapchat, Instagram, and TikTok are platforms where more informal and "goofy" posts are expected. They allow consumers to get seconds-long "inside looks" at their favorite organizations, some via self-deleting pictures or short videos. X, formerly called Twitter, is a platform to share news and quick updates. It may be the only platform where a business can post many times a day without overwhelming followers.

Social media users tend to "follow" individuals (friends, family, celebrities, etc.) rather than organizations, but when social media users follow a business, they often create a strong bond and show increased brand loyalty. They may expect that the organizations they follow will make no more than one high-quality contribution ("post") per day. Social media users do not want to be bombarded with content and desire quality over quantity.

A social media presence for your business presents an opportunity to collect impactful reviews from customers' comments and "tags" (automatically linked to the customer's post on the social media platform). These comments and reviews are often seen as more trustworthy than traditional comments left on a company's website or various web outlets. When you do receive a comment, it is ideal to respond within 24 hours if possible. Responding shows your customers that your business is engaged and listening to them.

Table 1. Major social media platforms available in the United States along with their total worldwide monthly users.

Social Media Platform	Type of Platform	Monthly Active Users at End of 2024
Facebook	Social network	3.0 Billion
YouTube	Informative video	2.5 Billion
Instagram	Picture & short video with captions	2.0 Billion
TikTok	Picture & short video with captions	1.6 Billion
Snapchat	Very short self-deleting videos	800 Million
X (Twitter)	News and information	619 Million
LinkedIn	Professional networking	310 Million

To use social media for small business promotion, you'll likely want to choose your most engaged social media employee for account management and posting content. Make sure everyone using the business' social media accounts is on the same page with respect to appropriate content and style. Avoid the common pitfall of accidentally posting private content under the organizational account. Consider obtaining a second mobile device for all business content and do not allow employees to log in to that account on their personal devices. And remember that nothing is ever permanently deleted on the internet. Always save a copy of your content to your files.

Note: It's important to maintain consistent branding across channels.

ADVERTISING

Advertising is paid promotion in print (newspapers, magazines, flyers), broadcast media (radio, TV, internet, podcasts) or online (website, blogs, social media, email newsletters).

Different methods of advertising can be used together. For example, it is often cost effective to buy small print ads designed to direct traffic to your website and social media sites or use radio ads to provide information about your product or guide potential customers to your website or place of business. In these cases, the ad needs little more than a catchy phrase, an attractive photo or logo, and the site addresses. Remember before you dive into paid advertising to make sure it will reach your target customers.

Advertising and promotion can be expensive and difficult to do effectively. Paid print and broadcast advertising can be "black holes" of cash flow with no guarantee of success. It usually doesn't pay to buy just a single ad. Instead, develop a series, or "campaign" of ads that includes a message, plans for the size and frequency of the campaign, and a means to measure effectiveness. Your ad campaign message should echo your company's mission statement, a summary of your business' core values.

If you decide to move forward with paid promotion, determine a measure of **return on investment (ROI)**. For example, if you spend \$1,000 on an ad campaign and you can trace \$5,000 worth of sales to that campaign, then you have an ROI of \$5 per dollar invested. But remember ROI is not profit: you still have the other costs of producing your product.

To determine ROI, you need to track the sources of your customers. You can use tools such as coded email, mailing addresses, survey questionnaires, or web analytics to indicate where the prospective client got

your contact information. If you have hired help from a web developer, they may offer a package to collect and organize this information for you.

Pay-per-click advertising is a model where you pay only when someone clicks on your ad. It is a sometimes expensive and sometimes effective way to advertise online. Advertisers bid on keywords (e.g. "fresh," "California," "crab") that they believe their target market will plug into search engines to shop for products. a business might buy several keywords. When the keywords are entered into the search engine, the advertiser's website link is displayed with the search results; when the shopper clicks on the advertiser's link, that advertiser is charged the amount bid.

Keyword research is the beginning of this process where you, the business owner, identify common search terms and phrases that your consumers use to find products or services online. These keywords should be incorporated into your site content.

Banner ads are digital ads that are positioned across the top, sides, or bottom of a website that link to the advertiser's website. They often include an attention-grabbing image, a logo, and limited text and are meant to generate traffic. Banner ads typically have lower conversion rates (visitors converted into customers) than SEO (search engine optimization) or content marketing (written material for blogs, newsletters, emails, etc.), because banner ads are a more intrusive form of advertising. You can use banner ad networks, which are publishers who connect advertisers to several related websites, to target specific types of host websites. Advertising costs can be based on impressions (views) or a pay-per-click model.

You can generate supplemental income from your website by displaying banner ads from other sites. This is known as reciprocal advertising. For example, direct marketers might find a cooking recipe website a good affiliate or reciprocal advertising partner. You could have banners advertising your website and displaying pictures of your products on the recipe pages for seafood dishes. If you choose to host banner ads be mindful of maintaining a clean appearance for your website.

Email and SMS marketing

Beyond having a website and utilizing social media channels, businesses often attract customers through email promotion and SMS (text) marketing. Curating a list of email addresses and sending emails directed at a specific target market has been very successful for seafood sales, with many businesses and associations using email marketing effectively. Emails can be augmented with valuable content to increase readership and response rates. Coined "content marketing," these

emails provide information of value to your target audience, like preparation techniques, recipes or unique knowledge.

Email marketing can be used to send messages to a list of existing subscribers to share information, drive sales or create community. Emails should be easy to read and worthwhile for subscribers to open. For example, they may have a sale, use images, have links, or share highlights from the week or behind-the-scenes photos or stories. One email marketing strategy may be to send an email at the beginning, middle, and end of the harvest for in-season updates along with any potential sale or discount opportunities. It is important to be consistent and to show up throughout the year—in other words, to stay in your customer’s inbox. Don’t be discouraged if less than 1/4 of recipients open your email, as open rates for email marketing may be low. Recipients will likely still see your subject line and any preview text their email client provides.

You may consider using an email marketing software (Mailchimp, Constant Contact, etc.). With these tools, you can create emails from templates, personalize messages, and segment subscriber lists for more effective marketing.

SMS or text message marketing involves sending text messages to customers, often for alerts on events,

promotions or holiday specials. The downside of this form of marketing is that you need customer phone numbers, and that information is often harder to get than email addresses.

Email and SMS marketing are opt-in, which means customers need to sign up for it.

Note: For both email and SMS marketing, utilize automations and schedule messages to be sent ahead of time to be more efficient.

Software platforms for website development, email and SMS marketing vary widely in cost. You should determine what you want from the software (template availability, custom domain, number of subscribers and messages, customer support, e-commerce integration, social media integration, etc.) and then select the option that is best for you.

Developing a website for marketing and promotion can be critical for small businesses to attract potential customers, establish credibility, and offer information about products. See Chapter 7 to learn more about effective website marketing.

Find more tips on marketing and promoting your product on the accompanying website to this manual, "Market Your Catch": <https://marketyourcatch.msi.ucsb.edu/start-expand/promoting-your-product/>.

Notes

Chapter 7

SELLING YOUR PRODUCT

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Sales are anything that directly results in exchange of product for money. Making cold calls, following up with customer questions online, servicing accounts, taking and filling orders, billing, and collecting payment are all part of sales. This chapter will walk you through what it takes to set up and make a safe and successful sale.

WHICH LINK IN THE CHAIN?

To which link on the distribution chain do you want to sell? If you have large volumes of product, it may be best to engage a broker or to sell to a distributor. If you have small amounts of product, you may want to sell to individual restaurants or small retailers. Some people get the greatest satisfaction (and greatest financial return) by selling directly to consumers. Keep in mind these general principles:

- The further up the chain you go, the greater the potential return, but also the greater the risk.
- Consumers have precise needs in terms of volume, quality, grade, etc. Generally, they buy to provide a meal for a person, a couple or a family and may want a particular item, such as a steak or fillet.
- Retailers and food service are also pretty choosy, but they use more per day or week, and they may be able to trim imperfections, cut H&G fish into steaks or fillets and hold excess product for a few days.
- Distributors and traders buy larger quantities and may be able to use different species and grades.
- Brokers work for pennies per pound, so they deal in volume.
- The further down the chain you go (with the exception of selling off-the-boat or out of your pickup), the more services and handling are involved. If you let a broker handle the deal, or if you sell to a trader, either person will arrange some of those services.

If you're looking for a broker, trader or distributor, you might want to look in one of the **seafood industry directories** for that type of business in your target geographic region. Some agencies, such as the Alaska

Seafood Marketing Institute (ASMI), publish directories of brokers, traders and other kinds of buyers and list producers, such as yourself. Be sure your business gets listed in the next edition, along with the products and product forms you plan to sell.

You can also find restaurants, supermarkets and retail fish markets in some industry directories or online.

PICKING A GEOGRAPHIC MARKET AREA

Unless you're planning to sell fresh fish from your boat or pickup truck, you need to choose a geographic market.

In general, consumers in large urban areas across the United States now have a pretty good selection of quality fish from which to choose, but those in smaller cities and rural areas still are hungry for more seafood.

If you're thinking of shipping your fish outside the region where you catch them, think about what advantages you have regarding other regions. Are you from, or do you have relatives in, another part of the country? The best way to sell fish in another region is to live there. Do you have any advantages in a particular location that favor it over others?

You'll need to determine how to transport your products efficiently. Study the geography of the region, including the available transport infrastructure present in the area. Learn everything about your potential customers. Understand the whole distribution network, who the players are and where the potential customer fits into that network.

SALES CONSIDERATIONS

(Preparing to Sell)

Know the customer's needs. If selling to a business, consider needs of that business and those particular to the resale of your product. Find out who in the company does the actual purchasing and arrange to talk to that person. Keep in mind details like consistency in your ability to deliver product, frequency and volume of product, desirable product forms, payment terms, and shipping. These will be important considerations to a business that will potentially buy your product. Also consider the needs of the final customer, keeping in mind common requests for diverse product forms and convenience in packaging, storage, access, payment methods, and availability of complementary goods.

Be sure to know what price the market will bear. Base prices are driven by major processors who have lower unit production costs and can get breaks on packaging and freight rates. Some buyers expect to pay fishermen less than the going rate because dealing with fishermen entails greater effort and risk. Have a strategy for responding when a competitor comes in with a lower price.

Call ahead for an appointment and go prepared for an interview. Dress appropriately. (Don't try to impress buyers by dressing like a fisherman fresh off the boat; dress like a business person with a product to sell.)

Take product samples to the interview. Provide a photo album or a brochure that describes the attributes of your product. Be prepared to tell the story of how you catch and handle your fish. The story of the fisherman and fish can be just as important as the product.

Make a proposal and ask for a commitment to purchase. Write down details like volume, delivery schedule and product specifications.

Don't promise more than you can deliver. Under-promise and over-deliver is the key to good business.

Try to get everything in writing, especially quantities, sizes and grades, quality standards, delivery schedules, prices and payment terms. Use fax or email to confirm any verbal agreements.

A NOTE ON PRICING

In general, pricing is not a good way to compete in the seafood business, for two reasons:

1. By charging a lower price than a competitor you may create the impression that your product is not as good.
2. If competing businesses start lowering prices to lure customers, they can quickly get into a price war and drive down the price to the point that no one makes a profit. Experienced seafood marketers advise that you set your price at a level where you can make your profit goal and then stick with it. Compete instead on the basis of quality and service.



Photo Courtesy of Oregon Sea Grant

REACHING THE POINT OF SALE

Making a sale can occur in several ways, and it's important to treat this step as carefully as all the others:

Step 1: Create a product description — Make sure to clearly describe what you are providing

Species name (common and scientific)	Quantity per package
Weight in ounces or pounds	Processing Type
Type of packaging	Package date
Price	Harvest date

Example:

Species: Sockeye Salmon (<i>Oncorhynchus nerka</i>)	Quantity: 1 fillet
Weight: 5 oz	Processed: Blast Frozen
Type of packaging: Vacuum sealed	Package date: 7/25/2024
Price: \$10	Harvest date: 7/10/2024

Step 2: Specify type of payment and terms

Provide clear instructions for reaching you in case of any problems with the order.

Picking a point of sale (Direct to Consumer Sales):

Modern point-of-sale (POS) systems allow businesses to accept customer payments in addition to tracking sales. In its simplest form these systems constitute a credit card scanner connected to either a tablet or cell phone. The combination of the hardware and software increases efficiency and ease of sales and customer management.

There are many different POS systems available to small businesses, and they range in ease of use, hardware options, subscription pricing, transaction fees, and customization options.

Be sure you get paid (Business-to-Business Sales):

Some sales may be a direct exchange of cash for product. In other cases there are many things to consider.

If possible, **do a credit check** on your customer and check out the company's reputation. Some companies have been known to cheat small and remote suppliers who can't afford the time and costs involved in collection.

Start small. Avoid delivering large quantities of product to anyone until they've established a track record of paying promptly and in full. a common scam is to pay for two or three small shipments and then default on a large volume purchase, so build your relationship carefully.

Set realistic payment schedules. Most corporate buyers expect to pay anywhere from 14 to 30 days, or more,

after taking delivery of your fish. If you can't live with this, specify cash only, but understand that it can greatly limit your potential market. Find out what payment schedule is normal in your market segment, then insist that your customers adhere to it.

Establish a system for verifying the quality of the product when it arrives at its destination. Use temperature loggers (TTIs - Time Temperature Indicators, see page 18) or contract an independent agent to examine each shipment and verify that your product arrived in good condition, especially if the buyer has a reputation for rejecting shipments or not paying.

Protect yourself with insurance. Most seafood products are highly perishable and a brief delay in delivery will make them worthless. Furthermore, many seafood products can spoil and cause sickness, posing a liability threat. Cover these risks with product insurance and product liability insurance. You can find companies providing this insurance in business directories (such as the "Business Resource Guide for Alaska Fishermen," published by Alaska Sea Grant, <https://seagrants.uaf.edu/bookstore/pubs/MAB-57.html>). See also Alaska Sea Grant's FishBiz website, <https://alaskaseagrants.org/fishbiz/> for more guidance.

Be prepared for claims and short pays. Customers may be unhappy with the product they receive. It is important to have a plan in place for when this occurs. Customers may request a replacement product or a credit on their purchases. You may want to get the product back and resell it to another customer.

Insurance

Direct marketers can mitigate some business risks with insurance. Insurance brokerages that write policies for a broad range of business types may offer insurance products useful to a seafood direct marketing operation. Some classes of coverage to consider:

Business Income Insurance can cover losses incurred during resolution of a product liability dispute.

General Liability is a class of coverage that can cover “slip & fall” risks at a facility, personal injury, advertising injury and other forms of business liability risk. Some general liability policies cover product liability on unprocessed seafood.

Product Liability covers the producer or marketer in the event that a person consuming the product becomes sick (or claims to become sick) as a result. Foodborne pathogens like *Listeria*, *Salmonella*, *Vibrio parahaemolyticus* and *E. coli* can be present in even properly handled fish and shellfish.

Auto Liability covers vehicles used in the business.

Property and Equipment Breakdown as the name implies.

Business income insurance can provide continued income should a covered disaster cause suspension of operations.

Workers Compensation coverage is required in most states to pay medical bills and wages for employees injured at work.

Advertising Injury, Cyber Liability, Employee Dishonesty and Employment Practices Liability policies can provide compensation for losses due to business practices that are found to be injurious to a customer or competitor.

“**Umbrella**” policies raise the liability limit to an agreed amount greater than the standard \$1 million for other liability policies.

A “**business owners package**” or BOP could include general liability, property and machinery, non-owned and hired auto and employee liability (which in some states is purchased in place of workers compensation insurance). a BOP may or may not include product spoilage, and may be written to include cyber liability.

Premiums for most of these classes of policy are based on a percentage of the dollar value of sales, but even the smallest producers can expect to pay upwards of \$1,000 per year for a basic general liability package.

Most policies likely would not cover losses due to customers not paying for their purchases and losses incurred onboard the catcher boat or during transport or storage of the product. Product loss during transport or storage should be covered by the shipper or storage facility’s insurance, but it is up to the seafood business

to ensure that is the case. Product loss while aboard the producer’s own vessel should be included in the general marine or inland marine policy that the fisherman or boat owner maintains.

It is possible to buy insurance against almost any risk, but the price can seem disproportionately high. Check with marine, food or general business insurance agencies to see if there is a policy that covers your risks at an affordable price.

Step 3: Maintain professionalism

The way you take people’s money can tell a lot about your personality, credibility and the quality of your business. Be businesslike but don’t appear greedy, and, at all times, be gracious, polite and appreciative.

CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

It is cheaper to keep a customer than to find a new one. Keeping customers requires keeping customers happy by communicating with them to understand their needs and how to improve your products and services. Emails, surveys and buying habit analysis are a few examples of CRM that help you to know your customers so that you can serve them better. Analyze your product sales to see if you can identify trends, and use this information to prepare promotion strategies, emerging trends and opportunities for new products.

Advertising draws customers to your place of business or website, but it is still **up to you to sell the product**. To be effective you should have a neat and clean appearance, keep a tidy site, and be well organized with appropriate boxes, bags, receipts and change for cash purchases. Above all, you must be outgoing, cheerful, polite, and present a welcoming image to would-be purchasers.

Under-promise and over-deliver is the key to good business.

CONSIDERATIONS FOR SELLING ONLINE (E-COMMERCE)

The internet has fundamentally changed marketing. Many small businesses now devote most of their promotion budgets to website design, optimization and maintenance. The web is the great business equalizer. It has allowed the bypassing of middlemen and expensive distribution networks. Few companies can ignore the internet as a marketing and sales tool. Increasingly, e-commerce also encompasses a variety of business functions, including “front office” tasks like promotion and marketing as well as “back office” tasks such as order fulfillment, inventory management and accounting tasks.

The primary e-marketing application is the **website**. It can be as simple as a one-page electronic brochure or a fully interactive site with multiple pages that can support online sale of products.

Creating a website or landing page to market your business and **sell your seafood** products is an excellent way to allow potential customers to learn more about your business. Visitors to your site are able to find out more about you and your products. More advanced options for larger markets can include e-commerce options for customers to purchase products online for pickup, delivery, or shipping directly to customers.

CREATING A WEB PRESENCE

Give careful thought to meeting your marketing strategy goals with e-commerce. For example, if you have targeted direct sales to consumers of your seafood products, your site should be rich with product information, including recipes and themes with fishing and or harvesting content.

If your target market is regional distributors and wholesalers, your website needs different content and should handle inventory queries, order processing and shipment tracking. Include advertising and promotional materials that distributors and wholesalers can incorporate into regional or local advertising. a well-designed website, even with significant upfront costs, can function like a finely tuned sales force that works smoothly for many years. Unless you have experience with developing effective websites you may want to hire a pro to build and optimize your site.

Here are some factors that make productive and attractive websites:

1. **Good site design** – Get your most important information up front, since people spend only a few seconds looking at a site unless it really grabs their interest. Ensure easy site navigation.
2. **Search engine optimization** – Websites work because prospective customers use search engines, so your site has to be built and include the right keywords and links to make it rank highly with the main search engines. The search engines change their ranking criteria from time to time, so the optimization must be renewed periodically. Use links to other sites but learn to use them correctly.
3. **Web analytics** – You can use services to analyze your site and tell you how many “hits” your site is getting, where (what search engines) they are coming from, what keywords are drawing the hits and so on.

4. **Effective content** – Define your product, its qualities and your service. Use simple, clear language and leave out buzzwords. Develop a personality or theme in the site and speak directly to the prospective customer. Include a call to action (“buy now”) and make the interface aesthetically pleasing. Tell the reader how to reach you by email, regular mail, phone, text and fax.

For marketing and promotion tips, see Chapter 6: Marketing Your Product: Finding Customers and More.

MAKE OR BUY?

Carefully consider whether developing your own website is the best use of your time, money and talents. The principal advantage of doing it yourself is saving money by not having to pay someone else. But, creating a website in-house could be problem-ridden, or worse, ranked low by major search engines. a key factor is search engine optimization (SEO). Websites that use descriptive titles and keywords and are rich in relevant content generally score higher in SEO rankings and will likely result in increased quantity and quality of traffic to the site. You can pay a digital media consultant to improve your in-house internet/SEO ranking and incorporate good website design. Some key points when selecting a web host: server space, data transfer allowance, tech support up-time guarantee, email accounts and reputation.

First, determine which elements/components of a website are most important to you:

- Custom domain name
- Low cost
- Ease of use
- Newsletter integration and management
- Integration of social media platforms
- Ability to adapt and incorporate e-commerce

Irrespective of whether you make your own website or hire out, give careful thought to the following characteristics.

- **Mobile compliant** – Your website must be compatible with popular devices besides desktops and laptop computers. Increasingly, customers will access your website via smartphone or tablet. Use a consistent format throughout your site.
- **Accessibility** – Plug-ins and player components enhance the experience for some folks but may discourage others within your target audience. Use them strategically.

- **Up-time guarantee** is a statement about the host's confidence in their server's reliability. a strong guarantee suggests reliable, well-managed equipment. Check on the reputation of prospective web host providers by using online forums and rankings.
- **Navigation** – Ensure that it is easy to move around in your website. Frequent and consistent use of buttons and other navigation prompts is important. Keep them the same size, color and position on all pages within your site so that users can find them easily.
- **Content** – Websites full of informative content achieve higher ranks by search engines. Personalized digital content is easier than ever to develop and always preferred to copied or cloned content from other sites. Linking social media is a great way to include customized content without requiring a lot of storage space. Linking or embedding YouTube video content is easy, and will attract customers from YouTube as well.
- **Advertising** – Any advertising housed on your website should relate directly to your products. Advertising can slow down the site speed, overpower your content and distract potential customers. However, links to other sites can actually boost your search engine ranking but should be appropriate, topical and of interest to your customers.
- **Speed** – Speed is probably the most important website consideration after content. a fast-loading page speed will help your SEO efforts, as fast sites are ranked above slow ones. Effective use of other media platforms, embedded within your website, will support vivid media without slow speed and high storage costs. Try not to host rich media in-house; embed media housed on external platforms when possible. Your website's speed and cost will be influenced by where your site is located and the host server computer's capacity and speed. Website performance will depend on **bandwidth** available, the reliability of the server and the web host's **broadband**. Increasingly sites are hosted by cloud-based providers that provide high speed and reliability. Performance should take priority over cost in deciding where to host your website.
- **Updates** – Update your content frequently. Be sure that all the links are current and work well. Many tools are readily available to help make your site function. Most web host providers offer extensive support for site development, like shopping carts and check-out processing, and they are available as part of the subscription or at a nominal cost.
- **Brand recognition** - Keep your content visually consistent and in line with your mission and values.
- **Technical support** - The quality of a host's technical support is an important consideration, depending on your expertise. Judge technical support by its availability and results; it should be staffed 24/7 by knowledgeable folks and accessible by toll-free telephone numbers with short waiting queues.
- **Creating a custom domain name** – Choose a clear, effective domain name. This acts as your unique website address, you don't want it to be complicated or confusing. Shorter names are often better and avoid numbers and hyphens. Make sure your domain has a .com extension (unless something else makes more sense). Register your domain name with a domain registrar. This can cost typically between \$10 and \$20 per year.
- **Security** - When taking payments online be sure that your chosen web platform is a trusted e-commerce host that provides encrypted payment gateways.
- **Scalability** - When creating a website, be sure to consider the potential to expand into e-commerce or other marketing integrations.

YOUR WEBSITE AND OTHER MARKETING TOOLS

Your website can be a simple landing page with basic information about your business or it can be developed further to utilize other marketing channels and tools. Depending on the web platform you choose, you may be able to incorporate **email marketing, blog posts, social media pages, e-commerce sales** and other ways to connect with customers and potential customers, share information, drive sales, or create community. Alaska Seafood Marketing Institute (ASMI) has resources devoted to Alaskan direct marketers.

Subscription models allow customers to pay a monthly, seasonal, or yearly fee to receive seafood from you on a recurring basis. Recurring charges can be automated and frequency of shipments controlled by the customer. a subscription box model can be an effective way to keep existing customers. Subscription models create a steady income stream that builds over time.

Note: Keep an eye on potential future trends in e-commerce—specialization of smaller retailers (niche product offerings, more personalized service), immersive customer experiences, distribution and delivery innovations etc.

Thanks to Sea-Mountain Insurance, Associated Insurance Services and Shorepoint Insurance Services for assistance.

Chapter 8

FORMING A SEAFOOD DIRECT MARKETING COOPERATIVE*

*Original contributor: H. Charles Sparks, PhD, CPA
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Every marketing activity requires time and specific expertise, and not everyone has enough. What's more, time spent performing marketing activities reduces the time available for fishing. An alternative to working independently is to collaborate with like-minded fishermen. Collaboration can be anything from employing a manager to plan and execute specific marketing activities to creating a complete wraparound marketing business that has full responsibility for selling your fish. One way to formally collaborate is to form a cooperative.

WHY A COOPERATIVE?

A cooperative, or co-op, is a type of corporation that can provide services like marketing to its owners. Producer cooperatives have a long history in the agricultural and seafood industries. Cooperatives function like other fish companies with one major exception: profits accrue to the members of the co-op rather than to often-distant shareholders. Usually the members who sell their catch through a co-op end up with more money than those who sell to a corporate-owned processing company. At the same time, co-op members share in the decision-making process rather than living with the decisions made by corporate owners, though those decisions still have to assure survival and profitability for the enterprise.

Advantages of working collectively include:

- Upfront capital costs can be shared.
- The enterprise can enjoy economies of scale, which decreases the costs per participant for essentials like packaging materials and shipping.
- Multiple producers can ensure a steady and robust supply of product. Higher, more consistent volume can open some marketing channels like regional distributors that might be impossible for a single fisherman to service adequately.
- Several fishermen providing product spreads the risk that weather or variable fish returns will interrupt the supply of product necessary to satisfy a distributor or market.

It is important to keep in mind and decide early who will be responsible for non-fishing tasks including finding markets, designing and buying packaging, managing inventory of packaging and product, negotiating transportation, shipping, insurance and fielding customer questions and complaints.

There are several ways to organize a marketing cooperative, but a simple fee-based membership meets the need to collect startup funds and engage in marketing activities.

ORGANIZING A COOPERATIVE

The first step in forming a cooperative is to locate others interested in direct marketing as a group. Then the participants need to agree on what the business will do and estimate how much money it takes to do it. Next, the group needs to raise money and develop a plan of operations. Usually a group of owners will need more time to make these decisions than you would if you did it all yourself. After agreeing to form a cooperative the next steps are to formally organize:

- Filing articles of incorporation with the state
- Adopting bylaws
- Obtaining a tax identification number
- Opening a bank account

Often it is best to engage an attorney to help with the legal steps.

Chapter 9

SEAFOOD PRODUCTS PACKAGING

Original contributor: Cynthia Wallesz, CAW Consulting

This chapter is relevant for fresh, frozen and live seafood products. If you are interested in getting your product canned or pouched, know that your processor will present you with options; in other words, you will not need to know how to select the materials necessary for canning or pouching if you are using a processor. Proper packaging is necessary to maintain product quality, especially for live, fresh, and frozen seafood. Proper packaging prevents physical damage, temperature stress, and spoiling. Containers must not leak, because fluids can damage transport vehicles and aircraft and are likely to be disposed of so as not to endanger other packages.

Many types of containers are available for shipping. The table below shows the types of containers generally used for different seafood product forms. Keep in mind the poundage and size of the product you're shipping. Generally, you'll want to use the smallest possible box that can hold all your product and packaging materials.

This will help to minimize shipping cost, maintain temperature, and prevent product damage through shipping. Another consideration is whether you can physically manage, store, and keep all packaging materials clean throughout the process to ensure a high-quality end product.

Type of product	Suggested container or packaging
Fresh	Wax-impregnated wetlock boxes, 4 mil liner with zip tie
Frozen	Cardboard box, 2 mil plastic liner, insulated foil liner if product may sit unrefrigerated
Live	Packaging is dependent on live product type—usually following the same guidelines as fresh product but also including net bags to contain shellfish, or banding for claws of live crab

CONTAINERS

Fresh seafood is commonly packaged for shipping in wax-impregnated wetlock boxes. The wax strengthens the cardboard and repels water, but it also makes the box brittle, so it can damage easily if dropped or mishandled. Wetlock fish boxes are available in various capacities: 25 pound, 50 pound, 80 pound and 100 pound.

Frozen seafood is typically packaged for shipping in cardboard boxes. Boxes come in a lot of shapes and sizes. Select the size of box that your product will fill without overfilling.

Understand any restrictions your carriers may have for box sizes and/or weight. For larger shipments, contact your carrier to use pallets, totes or other suitable containers.

PACKAGING MATERIALS AND RESOURCES NEEDED FOR SHIPPING

- Appropriate containers or boxes to fit the items
- Box liners
- Plastic liners
- Insulated foil liners
- Chilling medium for fresh and live
- Gel packs
- Wet ice
- Dry ice
- Packing tape
- Rubber bands
- Temperature loggers
- Certified scale
- Permanent marker or computer labels
- Strapping system
- Truck or other means to deliver each shipment to the freight carrier



Photo Courtesy of Alaska Seafood

Live seafood is typically packaged for shipping depending on the species. Shellfish are generally bagged in a net bag and packed with wet ice into a fresh box. Live crab is usually packed in a waxed box with fresh ice and banded claws.

Box liners – After box assembly, insert a plastic poly liner, essential for fresh shipments. They are designed to fit in different box sizes and come in thicknesses from 1.5 to 4.0 mil. The lower the mil rate, the thinner the liner plastic. Airlines require all flown fresh seafood to have a 4 mil liner that is zip tied shut. Frozen seafood is usually shipped with a 2 mil liner. Foil-insulated liners can be added for extra insulation on fresh and frozen seafood box shipments. The foil material reflects radiant outside heat, and the FDA-approved inner bubble layer is an effective insulating air barrier. They are a light and inexpensive insurance and come in various sizes.

Gel packs – These protect product from outside heat. They are used when packaging fresh seafood for shipment and are often included with frozen seafood. The gel packs should never be placed inside the box liner contacting the seafood. Always place gel packs on the outside in case the packs leak during shipment. Many direct marketers will find the 1.5-pound packs most useful and available, but they come in a variety of sizes and weights. Keep in mind that gel packs are intended to slow the inflow of heat into the box's interior and your pre-chilled product. Gel packs will not lower the contents' temperature. Packs must be frozen thoroughly prior to use. If undamaged, gel packs can be refrozen and reused.

Wet ice – Commercial wet ice may be made with salt water and will keep products colder than store bought ice sold for human consumption. Wet ice that contacts the product must be certified as food grade, meaning it has been tested at some time to meet FDA standards. This certification can be provided by the ice supplier.

Dry ice – Although very effective, dry ice is expensive, difficult to source, and comes with handling risks for the packer and the customer. Make sure you notify the shipping company when using dry ice.

Temperature loggers record the temperatures your product experiences during shipping and handling and can be extremely valuable to help ensure the quality of your product. These are available at different price points based on need. The customer can download the data on receipt. There are some that will transmit the data back to the shipper, though they may be cost prohibitive.

Maintaining low temperature during shipping is the most important factor in maintaining quality along the supply chain (see quality and shelf life material in Chapter 5).

Alaska Sea Grant conducted a test on boxes and gel packs to determine their effectiveness in maintaining temperature and extending maximum transit time. In laboratory tests, 50 pounds of salmon pre-chilled to 32 degrees F was packed into insulated and uninsulated boxes with and without gel packs and held at 60 degrees F. The time it took for the product to reach 40 degrees F was then measured.

Time	Uninsulated wetlock box	Wetlock box with 3/8" polystyrene insert
Time to reach 40 degrees F when held at 60 degrees F	6 hours	12 hour
Time to reach 40 degrees F with gel packs in top and bottom of container	9 hours	21 hours

This test indicates that the general use of insulation and gel packs greatly extends the time seafood can be kept at acceptable temperatures. High-quality packaging makes it possible to ship the highest-quality seafood to discerning markets worldwide.

LOADING THE BOXES

Whether shipping fresh, frozen or live product, it is important to **maintain proper temperatures** throughout the packaging process. When loading product into boxes, make sure you do so in a covered, cool or shaded area to prevent quality loss. Keep the product and packed boxes in the cooler or freezer until the last possible moment before transport. Pack product carefully, as visual quality is important to most customers.

- If shipping fresh, chill the product to about 32°F before boxing. Airlines and freight forwarders will reject fresh product above 38 degrees. To pre-chill, use slush ice, flake ice, chilled seawater, a refrigerated van or cold storage. Remember that any material that comes in contact with the product must be food grade certified—this includes any form of ice. Advantages and disadvantages of each refrigeration method are discussed in Appendix D. If shipping frozen product, freeze it thoroughly before packaging and keep frozen until shipping.
- Select the correct type and size of box for the contents. Put the desired liner (plastic, foil or both) into the box.
- Put the box on a certified scale tared to subtract the weight of the box and carefully place each fish or product item into the box. Note the net product weight for billing and record-keeping. Add gel packs or ice and distribute them throughout the container, wet ice inside the liner, gel packs or dry ice outside the liner.

- Consider adding a temperature logger to the package, nestled close to the seafood product to track temperature during shipment. These can be picked up fairly cheaply. Using temperature loggers is a best practice and helps to avoid refunding money if the customer complains of temperature issues during transport.
- If using a plastic liner for fresh or frozen products, tightly close the liner with a twist tie. Secure foil liners with packaging tape. Do not seal liner if shipping live products.
- Close the container. If it is cardboard, tape it, and if desired, strap all boxes with banding material in at least two places, depending on the size of the container.
- After the box is closed and labeled, reweigh to obtain the gross weight to determine shipping costs.
- Apply a label to the outside of the box. This can be handwritten or computer-generated and must list the shipper's full name, address, and phone number, the receiver's full name, address, and phone number, the species of product, catch area, allergen statement, box number, and whether the product is fresh, frozen, or live. The carrier and customer may have additional label requirements.

Preparing to ship or deliver – Take your loaded containers directly to your chosen freight carrier, minimizing the time the boxes are not in a chilled environment. If it's not yet time to ship, store your boxes in a cooler or freezer until shipping time. See Chapter 10 for more information on shipping considerations.

CONSIDERATIONS FOR SUSTAINABLE PACKAGING MATERIALS FOR SHIPPING

Packaging waste and its effect on the environment are growing concerns for consumers and producers alike. Seafood packagers are working to develop more sustainable packaging materials; however, the nature of seafood shipping does not easily lend itself to the requirements of recyclable packaging.

Packaging that directly touches food must be certified safe for food contact. The current requirements for food contact packaging state that there must be a clearly documented path to show all raw materials used to create

the finished product. Recycled materials do not usually have traceability on the raw material. This requirement makes it almost impossible for food contact material to be made out of recycled materials. Additionally much of the fresh seafood shipped out is sent in waxed boxes —this is a requirement of shippers and airlines—and currently there are few areas that offer recycling options for waxed packaging.

Despite the hurdles, packaging producers are investing in research to develop new options and make packaging more environmentally friendly. The industry is hopeful that cost effective options will become available and standard in the food supply chain.



Photo Courtesy of Oregon Sea Grant

Chapter 10

SHIPPING YOUR SEAFOOD AND LOGISTICS TO KEEP IN MIND

Original contributor: Cynthia Wallesz, CAW Consulting

Proper shipping and handling can determine success or failure for direct marketers. Your product needs to arrive in the condition and timeframe you promised, or you may need to find a new customer to replace the disappointed one.

PREPARING TO SHIP/MAIL YOUR SEAFOOD PRODUCT

In many areas, shipping is not easy and can become one of the biggest expenses in a direct marketing business. Shipping is also the area of your business where you may have the least amount of control. To get your products smoothly to market, assess the risk of each potential shipping option, choose the appropriate option for your situation, and carefully plan every step in the shipping process. Even the best of practices won't guarantee the safe arrival of your products, but it will increase your chances of shipping and business success.

Some things to consider when analyzing options:

- How are you going to get your product(s) off the boat?
- Who will move the product and how?
- Where will you store your product and keep it cold before you are ready to ship?
- If your product is not on the boat anymore (for example, it's in cold storage), how will you transport it from this place to the shipping carrier? Some shipping companies have cold storage available, but not all. If shipping a large amount via a barge, there may be frozen container options.
- Remember to consider these factors for each of your products. Your products may have different shipping needs based on the type of product, where it's landed and going, the volume of product and the type of buyer.
- How will you maintain product quality during each step of the shipping process?

READY TO SHIP/MAIL YOUR SEAFOOD PRODUCT

When you are ready to ship your product, make sure you know the answers to the questions below. These will help you understand how and for how long your seafood product will be in the hands of the shipper, enabling you to prepare and package your product so that it arrives to the customer in good shape. (For packaging considerations, see Chapter 9.) An important note is that new businesses must be audited and accepted as a known shipper before many freight forwarders will work with them. a "known shipper" is a designation for shippers who have been vetted by an air carrier or freight forwarder. This designation is granted through the U.S. Transportation Security Administration (TSA). Shipping companies usually have someone on contract who can provide this service.

Ground Transportation

- Do you need to be verified as a known shipper?
- Which carriers serve the area where the product is being shipped? Which of these companies has the best reputation for handling premium seafood? Are personnel competent when it comes to handling sensitive shipments?
- Are the schedules convenient to both shipper and receiver?
- How will the product be shipped? Will each discrete shipment get its own box or will individual shipments be contained in a large unitized container?
- What information must appear on the box to assure uninterrupted shipment and delivery?
- What additional regulatory documentation is required for the shipment?

- Does the shipment need to be insured? What are the types of insurance coverage, limits and costs? Does the carrier provide insurance for customers?
- How many types of carriers do you need to get your product to your customer? What are the options for each one and how much do they cost?
- Do the carriers offer assurances that they will deliver your shipments on time and in great condition?
- Is it safer to ship frozen or fresh with a given carrier?
- Does each carrier you use have coolers and/or freezers available for use?
- Are you organized? Be sure to carry with you the contact information of each carrier and customer.
- What packaging precautions will ensure product quality? Extra gel packs? Supplemental box insulation? Extra packing material to prevent shifting? (See Chapter 9 for more information about packaging.)
- Are there any different requirements for the location you're sending to compared to the area you're sending from?

Additional Considerations for Air Transportation

- Does the air carrier offer freight-only flights or is the product shipped on passenger jets?
- Are direct flights available or must the product be transferred between planes or air carriers? How many transfers will be needed to get the product to its destination?
- If the product must be transferred between planes, how long are the layovers? Which carriers have cool rooms or cold storage facilities where the product can be held during layovers and at its final destination?



Photo Courtesy of Alaska Seafood

- What arrangements must be made to assure that the product is shipped on a particular flight? Must cargo space be reserved in advance, and how far in advance of departure must the product be delivered to the freight office? When will the product arrive at its destination?
- Will the product be held at the airport or shipping company yard for pickup or will it be delivered to its final destination? Who is responsible for the delivery? What local freight forwarding companies have good reputations with fresh seafood shipments?
- When does the customer need the product to arrive? Are communications channels with the air carrier, customer and freight forwarders well-established, so that everyone involved knows the schedule and arrangements? Is a computerized freight tracking service available?

Getting your seafood product from Point A to Point B, C, or D requires serious thought, consideration and research. The sections below will help you think through the potential time it may take to ship your product, the associated costs and more. See the flowchart examples below for shipping examples from various locations using different product forms. Pay close attention to the rate of decay table (Table 2) to understand how long your seafood product can stay fresh and at what temperature.

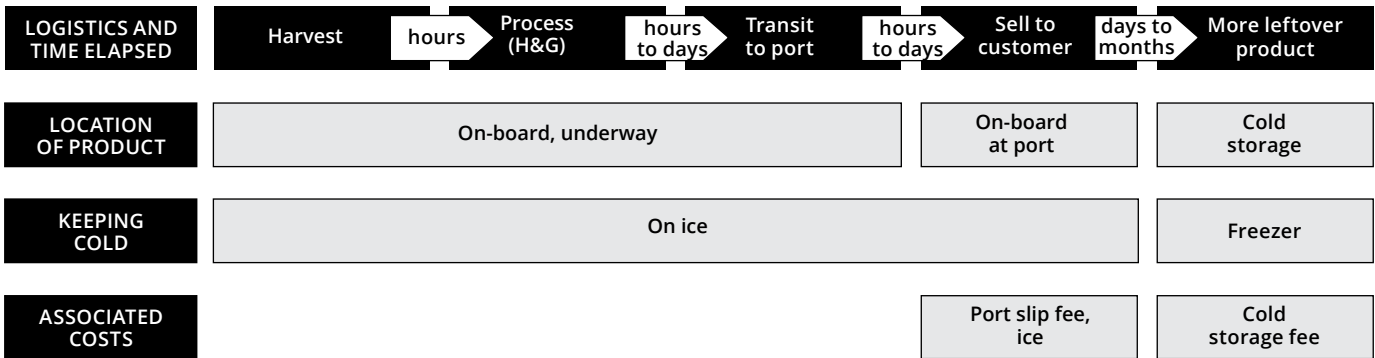
Table 2. Relative rates of spoilage and loss of equivalent days on ice for different temperatures and times*

Temperature		Relative rate of spoilage	Equivalent days on ice with time	
°C	°F		12 hrs.	24 hrs.
-2.00	28.40	0.64	0.32	0.64
0.00	32.00	1.00	0.50	1.00
2.00	35.60	1.44	0.72	1.44
4.00	39.20	1.96	0.98	1.96
6.00	42.80	2.56	1.28	2.56
8.00	46.40	3.24	1.62	3.24
10.00	50.00	4.00	2.00	4.00
12.00	53.60	4.84	2.42	4.84
15.00	59.00	6.25	3.12	6.25

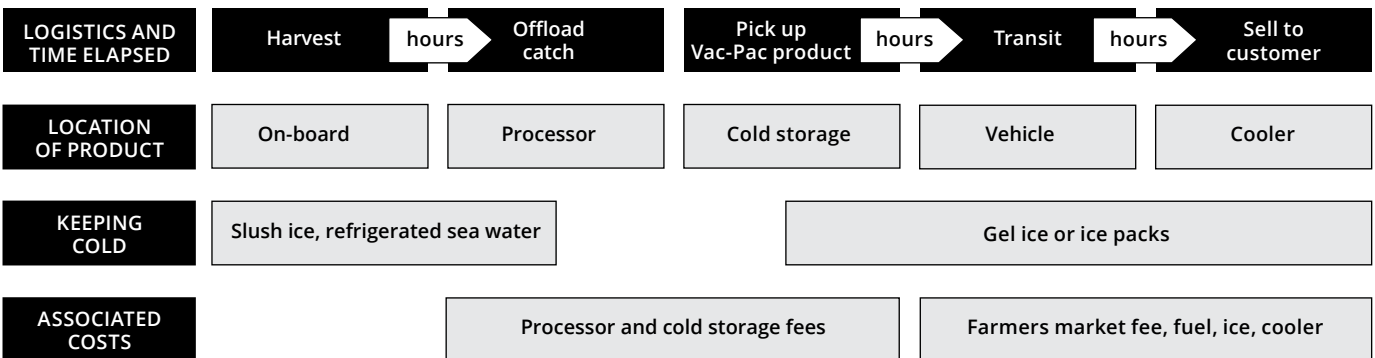
* Equivalent days on ice computations were carried out to three places for mathematical accuracy only. Because of biological variability within a species, numbers are meaningful only to one place past the decimal point. For example, if a fish is held at 50°F (10°C) for 24 hours, r = 4 means 4 days of shelf life are used in 24 hours; 2 days are used in 12 hours.

Table from "Care and Quality Handling of Salmon: The Key to Quality," John P. Doyle 1995

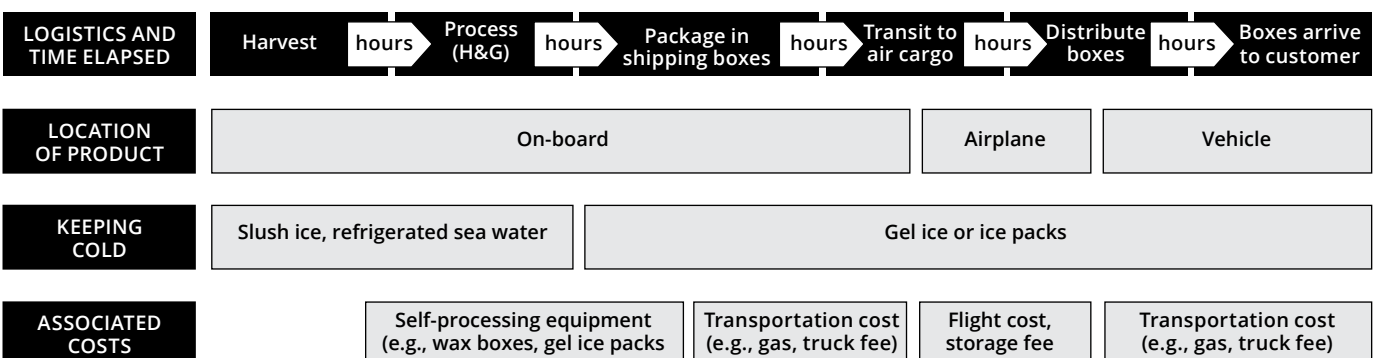
Seller profile #1
 Headed and gutted fresh
 sold off-the-boat/over-the-rail (simple)



Seller profile #2
 Frozen fillet vac-pac using custom processor
 sold at Farmers Market (moderate)



Seller profile #3
 Fresh headed and gutted
 sold using air freight (complex)



DECIDING HOW TO SHIP YOUR SEAFOOD PRODUCT: AN EXAMPLE

Using a decision chart can help you determine which, if any, shipping options are best for your situation. The example decision chart below illustrates the information it's important to gather and consider when evaluating your options. Make up your own chart for your seafood business, considering each product form and customer

base to help you determine your best options. Note that in some cases your research may reveal the best shipping options are too risky or expensive, resulting in a need for you to find another customer, product and/or shipping method.

Using the example decision chart below, which options would you choose to get your product from Alaska to Missoula, Montana and then to Molly's Fish Market?

EXAMPLE DECISION CHART

Product form and amount: Headed and gutted fresh salmon, 100 pounds

Origin: Anchorage, Alaska ▶ Customer: Molly's Fish Market in Missoula, Montana

Most air and ground carriers have specific guidance for shipping seafood. Please refer to their webpages for additional up-to-date information.

Shipping option	Product delivery	Cost of transportation	Time frame	Assurance or declaration from shipper	Notes to keep in mind
Self transport to airport	Boat ▶ Truck ▶ Local airport	\$20 gas	25 minutes	No	Use personal truck to bring product to airport
Air Carrier #1 Commercial Airline Cargo	Local airport to Missoula, MT airport	\$85 minimum + \$0.96 per pound (\$38.40 per 40 pound box)	2 options: A) Ships today 6pm-9am B) Ships tomorrow 9am-3pm	Must be packaged to withstand up to 48 hrs unrefrigerated	Option A: 17 hr trip Option B: 30 hr trip
Air Carrier #2 Private	Local airport to Missoula, MT	\$218 flat fee + \$50 per 40 pound box	Ships today 8pm-9am	Must be packaged to withstand up to 48 hrs unrefrigerated	13 hr trip
Ground Carrier #A Car rental/ rideshare	Missoula, MT airport to Molly's Fish Market	\$100	45-60 minutes	No	No refrigerated truck
Ground Carrier #B Private Cold Transport	Missoula, MT airport to Molly's Fish Market	\$200	60-75 minutes	Yes	Yes refrigerated truck

LIVE SHIPPING CONSIDERATIONS

Live seafood products typically sell at significantly higher prices than fresh or frozen. That value, however, comes at the cost of increased risk, regulations and logistical difficulties.

Moving/exporting some species within the state and across state lines may require additional permits and more. First, be aware that the transportation of some live species may be prohibited in some states, like in Alaska and California. Check with your state Department of Fish and Game to learn more.

Further, crab, mussels, shrimp, oysters, sea urchins, sea cucumbers, geoducks and other invertebrates are often marketed live. It is necessary to research the import and export laws in your home and market states to determine whether any pertain to your desired marketing efforts.

Another issue with live shellfish is the chance for paralytic shellfish poisoning (PSP) and amnesic shellfish poisoning (ASP), both of which can result from certain harmful algal blooms. The National Shellfish Sanitation Program (NSSP) has established standards for ensuring that contaminated molluscan shellfish (oysters, clams, mussels, scallops) do not enter interstate commerce. States also regulate the harvest of these and other shellfish during such events. Consult the NSSP website at <https://www.fda.gov/food/federalstate-food-programs/national-shellfish-sanitation-program-nssp> and learn about

your state regulations regarding these naturally-occurring toxic events.

Packaging and shipping present big challenges when direct marketing live products. Finfish require oxygenated seawater at all times to keep them alive. Mollusks and crustaceans have lower metabolisms than finfish and thus can be shipped without circulating seawater provided they are packaged in such a way that they remain cool and moist and there is oxygen/air exchange inside the container. Materials and techniques have been developed specifically for keeping mollusks and crustaceans alive during handling and transit (see Chapter 9: Seafood Products Packaging).

Excellent cooperation and communication between producer and buyer are vital to ensure that the product arrives at its destination not only alive, but hearty enough to sustain handling and storage at the other end.

It is advantageous to transport or ship your product directly via land, sea or air to its destinations from your landing port. Otherwise you will likely need to arrange for a place to recondition your product at intermediate stops while it is in transit.

Overseas markets may offer the highest prices for your seafood products, but international shipping is more risky, complex and regulated. An import agent or broker on the other end is virtually a necessity.

OTHER CONSIDERATIONS

Switching from fresh or frozen product to live is not easy, but it can be done. It will, however, impact almost every part of your business, from your catch methods to shipping and packaging to the kind of relationship you have with your buyer. The amount of work, attention to detail, and risk required will increase dramatically. Make certain the increased price you'll receive for your product is sufficient to justify these changes. For a compilation of academic and technical reports on the subject, order a copy of the Alaska Sea Grant publication Marketing and Shipping Live Aquatic Products at <https://seagrant.uaf.edu/bookstore/pubs/AK-SG-01-03.html>

Shipment follow-through. Get tracking numbers on all shipments and actively watch for tracking updates. Monitor your shipment every step of the way until it arrives safely in your customer's hands. It is not uncommon to have to call a carrier mid-shipment to verify the boxes' handling and/or destination. If there is a delay always ensure your boxes are stored in a freezer or cooler if available. Communicate often with your carriers and customers. Follow up with your customer to make sure your product arrived as expected.



Photo Courtesy of Oregon Sea Grant

Chapter 11

SETTING UP THE BOAT FOR OFF-THE-BOAT SALES AND ONBOARD PROCESSING

Original contributor: Greg Fisk

The late Greg Fisk, principal of SeaFisk Consulting and mayor-elect of Juneau, was an affiliate of the Alaska Sea Grant Marine Advisory Program.

Using your boat as a home base for direct sales can be pretty simple, and selling seafood from your boat may not require much change to your basic fishing operation. However, not all harbors permit such activity.

Selling off the boat can be more complex if you want to process your product on the boat and then sell it. Processing seafood even while on your boat requires additional investment and jumping through numerous regulatory hoops. Legal requirements governing direct marketing and onboard process activities vary by location. Your first task is to contact the relevant state and local agencies where you plan to operate.

OFF-THE-BOAT SALES

To retail unprocessed catch to the public directly from your fishing boat, you may not need to alter your boat at all. You can take product out of the hold and hand it directly to your customer. But there are things you should do to improve your setup. Help make your customers' trip to the boat to buy your product an enjoyable experience and they will be more likely to come back for more and recommend you to others.

- **Try to tie up in an easily accessible place.** a long walk to the end of a float can discourage customers, particularly if they have to lug a heavy load of fish back to their car. Work with your harbormaster to establish a service-oriented experience for seafood consumers at your harbor.
- **Keep your boat shipshape and clean.** Extra care is warranted when retailing to the public. Retail customers may be put off by gear piled on deck and fish coming out of bloody slush ice. Fish ready for sale should look as good as those at a seafood counter.
- **No pets.** It's unsanitary to have dogs or cats running around where you are selling food.
- **Be mindful of kids.** While many customers appreciate a family operation, it's unwise to allow kids to play on deck.
- **Maintain a covered area.** The FDA requires a covered area. a cover protects the product from "avian fecal contamination." If you can set up a cover that also offers your customers a little shelter from the rain, that's a good idea too. This structure does not need to be permanent and can be as simple as a pop up roof tent.
- **Keep enough change on hand.** Credit card terminals for tablets and smartphones and mobile payment services simplify transactions and are the preferred method of payment for most people now, but some continue to pay in cash. Be prepared to break a \$100 bill. Many off-the-boat fish sales are made on weekends, when banks are closed. Having a simple cash box makes things easier.
- **Use nice signage.** a scrap of cardboard with a hastily scribbled note in marker pen doesn't speak well of your business. Make some legible signs. If you can't print neatly, find a friend, relative or fellow fisherman who can. Sign printing companies make attractive custom vinyl lettering that you can apply to your own backing or signboard. Include a price list. a chalkboard can look very nice and allow you to make changes as needed. For directional signs and other signage off the boat, be accurate and clear. Don't forget to check with

the harbormaster and other authorities about posting signs in public areas.

- **Hang a large custom banner.** Include the business name, phone number, social media sites, and large colorful pictures of your products to attract customers. a banner can be attached to a standard pop-up tent.
- **Long customer line.** The use of stanchions for long lines can be helpful to avoid a large group in front of your booth and makes sure customers are helped in the order they arrive.
- **Bags or boxes.** Customers need a way to get their purchases back to their car in some sort of packaging that won't leak fish juices all over everything. Make sure you have enough on hand. Waxed boxes are great and people are often willing to pay for them to protect their car interiors. Paper and plastic bags are also good for packaging. Make sure to keep the outer bag dry. That means not handing the bag to the customer with a fishy glove on. For returning customers, encourage them to bring their own bags or coolers. Don't forget ice!
- **Carry the product to the customer's car,** if you can break away to do it. a couple of fish or crab in a plastic bag can be a real load. Obviously, you have to weigh this against being away from the boat. This kind of service will get you remembered and referred to other potential customers.
- **Be prepared to answer questions.** Customers may have questions about the product species, proper storage techniques, and preparation methods. Additionally, customers may be curious about when and where the product was caught. Let customers know how you and your regular customers prepare the product, especially for lesser-known species.
- **You are a professional, so act like a professional.** In your personal comportment and in the way you do business, it helps to be scout-like: "Trustworthy, Helpful, Friendly, Courteous, Clean." Treat customers honestly. Answer questions cheerfully, and don't look or act unprofessional. Finally, be businesslike.
- **Scale.** You will need a scale if you are selling your product by the pound. a certified scale is required in most states. This is an annual requirement in California by the Department of Weights and Measures.
- **Receiver's License or Fisherman's Retail License.** Check to see what licenses are required to sell direct

to the public in your state. For example, in California, a fisherman's retail license allows you to sell your catch to the public. a receiver's license allows you to sell your catch to the public and sell the catch of other licensed fishermen.

- **Ice.** All the fish should be covered with ice. You will also need additional ice and an ice scoop on hand to use for your display as the ice melts. Clean ice should be used for your display. The ice can also be used for customers' bags and coolers.
- **Merchandising.** Take the extra effort to make your display look nice. Lay out items in an orderly way that is visually appealing, don't use dirty ice from your fishy coolers, and place signage with species name and price where it is easy to see. Using tablecloths over folding tables makes for a nice-looking booth.
- **Organization.** Have all items needed for the market in containers that are easily restocked and ready to go. Forgetting the scale, cash or bags can make for a rough start at the market if you are trying to buy, borrow or having to go back home.
- **Equipment.** Make sure totes and coolers are scrubbed and clean so customers are not turned off by their food coming out of dirty containers. Plastic tubs can be used to put the product on the scale. This will keep the scale clean and free from water damage. Have a back up for when your electronics don't work. This may mean having an extra card reader. Replace old equipment when it starts to look worn and doesn't look clean even with a good scrubbing. Keep old worn equipment on the boat or out of sight.
- **Insurance.** It's a good idea to have some liability insurance. FLIP (Food Liability Insurance Program) has options for farmers markets, food trailers, caterers, and more. It is worth checking out a few companies and deciding which company is best for you.

Although land-based dockside or fishermen's markets are different from off-the-boat sales, they are often allowed in the same ports. For information on how to participate in a dockside or fishermen's market, visit California Sea Grant's website for the guide, "*How to Participate in a Fishermen's Market.*"

Visit the Sea Grant "Market Your Catch" website for more information about selling your catch through off-the-boat sales: <https://marketyourcatch.msi.ucsb.edu/alternative-market-types/boatover-bank-sales>

More information setting up or participating in a fishermen's or farmers market can be found in Chapter 12.

ONBOARD PROCESSING... SO, YOU WANT TO PROCESS YOUR CATCH?

*Adapted from "Working with a Broker or Trader,"
Alaska Sea Grant Marine Advisory Program, 2010,
Sunny Rice, Quentin Fong and Glenn Haight*

This is a dream of many seafood producers who want to improve the return they get from their harvest. Some sell their onboard processed harvest to regular processors on shore—many freezer trollers do this for example. For others the motivation is direct marketing. For all such operations, a few basic concepts apply.

Space. Get as much room as you can afford. If you are starting from scratch, buy the biggest platform you can. If you are constrained by your existing boat, do all you can to free up space so you have enough room to process.

Think through your process from start to finish. How is the catch landed and moved around the boat or facility?

What will happen to the catch, and where? How will it be stored? Regulations vary from one jurisdiction to another. Read and understand the regulations and talk with the responsible authorities before setting up your vessel or small shore operation for direct market processing.

Regulatory authorities want to help you succeed and often can supply a lot of good advice, but remember, their first responsibility is to ensure public food safety. Refer to Appendices E, F, G, and H for state-specific regulations in Alaska, Washington, Oregon, and California.

Surfaces. The surfaces that come into direct contact with your product must be of food-grade materials that are easy to clean and sanitize, do not impart tastes or odors and do not promote bacterial growth and contamination. Regulations in your area may allow properly treated wood surfaces, but nonporous metal and food-grade plastics are best, and when it comes to metals, go stainless. Some operations use aluminum tables, but aluminum corrodes and pits easily. Good-quality stainless steel is durable, easy to clean and resistant to chemicals and corrosion. It may be expensive, but bargain deals may be found at restaurant supply stores. Oftentimes, standard restaurant shelving, cutting tables and sink setups can be used directly or customized to work on a boat. Some locations require the use of National Sanitation Foundation certified equipment: be sure to check with your local health department for requirements.

Nonfood contact surfaces in your processing area must also be addressed. Processing functions need protection from the elements and from outside sources of contamination. Many boats use converted aluminum bait sheds for processing purposes, but pay attention to:

- **The interior framing** to make sure surfaces drain well, don't readily accumulate dirt and contaminants, and are easy to reach with cleaners and sanitizers. These principles apply to processing shelters made of other materials as well. Ideally, onboard processing areas should be lined with impervious, easy-to-clean, nonporous paneling, just like that used in onshore processing operations.
- **Possible sources of contamination**, such as fuel or hydraulic lines, should be re-routed and/or shielded to prevent drips or leaks from contaminating product or product contact surfaces. This may include running such lines through protective conduit or routing them below or outside processing areas. For hydraulics, consider switching to food-grade fluid if re-routing is difficult or costly. You may have to do this anyway if you are using hydraulic power in your processing line to power a conveyor or similar machinery.
- **The floor of your processing area** should be designed to be flushed and easily cleaned and sanitized. False decks that are common on many fishing boats can readily accumulate gurry and contaminants. Grating should be easy to lift and clean.

Lighting. Your processing area should be bright. This is important for properly working with your seafood product and for effective cleanup and sanitation. Regulations may prescribe required illumination levels. Lighting in processing areas should be safety-type fixtures suitable for marine environments and must be designed to prevent breakage and contamination of product and surfaces.

Water supply. Regulations in your area are likely to be quite specific about process water supply. Clean seawater may or may not be acceptable for primary rinsing or product transport, but will not be accepted for initial product processing operations unless water treatment operations are installed on the vessel. Check regulations in your areas. In any case:

- Avoid using any highly turbid or nearshore waters.
- Never use water taken from inside a harbor, due to water quality concerns.
- Stay away from other vessels while processing because you could accidentally pick up what they may be discharging.
- Do not flush your head or pump out sanitary holding tanks while drawing food contact water. Your water and sanitary systems should have valves that physically prevent this possibility, even if that is not a requirement of regulations in your area.
- Make sure that your processing water system is segregated from any other pumping system. Cross-connections with bilge pumps and other non-sanitary systems are not permissible.

Systems are available to provide continuous treatment of processing water with chlorine, quaternary ammonia or other agents, including acidified chlorine dioxide and ozone. Many water bodies now forbid the discharge of chlorinated water so be aware of local EPA and the Alaska Department of Environmental Conservation (DEC) requirements. If using batch chlorination, give products a thorough final rinse in the chlorinated solution, keep careful tabs on residual chlorination levels (such checks are likely specified in regulation) and change the solution frequently.

Discharge of process water. If you are permitted to conduct processing activities on board your vessel, make sure you are aware and correctly permitted for discharge of your process wastewater. Process wastewater is defined as any water that has touched fish during the process activities—even if that water does not include blood or gurry. Discharge requirements can be strict and penalties for non-compliance are high.

Cleaning and sanitizing. You simply must keep your processing area clean. Effective cleaning and sanitizing starts with good organization. Your processing area should be simple and uncluttered. Eliminate hard-to-clean nooks and crannies and keep processing surfaces accessible. Bleeding tanks, cutting tables and other processing areas should be flushed regularly and kept free of excessive buildup of blood and gurry while processing.

Cleaning and sanitizing should begin immediately after you have finished processing. First remove all large pieces of meat and gurry and then complete a wash down with plenty of clean water. Follow with a good scrubbing of all surfaces using a detergent that is approved for food processing areas. Do not use phenolic cleaners such as Lysol® or Pine-Sol® or any scented cleaner as these can affect the flavor and smell of your product. Keep a good set of scrub brushes on hand, specifically for these cleaning purposes. Brushes and plenty of elbow grease can do a fine job. Remember to give a little extra effort to those hard-to-reach places that can harbor bacteria. Thoroughly rinse off all detergent. Next, apply a sanitizing solution throughout the processing area. An effective sanitizing solution can be prepared with simple household bleach and clean water in areas where chlorine is allowed to be discharged to the water.

Pressure washers are excellent for cleaning and sanitizing and can significantly reduce your workload. Pressure washer units designed for marine use are available at reasonable prices. They can be mounted in your engine room, with outlets conveniently located on deck, where they are needed.

For more information on preparing a vessel for onboard processing and direct market sales, see The Onboard DEC Inspection, by Torie Baker of Alaska Sea Grant.

Notes

Chapter 12

FISHERMEN'S AND FARMERS MARKETS

Fishermen's and farmers markets are types of community-based alternative markets where fishermen and growers come together to sell their seafood directly to consumers and, when permitted, local chefs and caterers. Fishermen's markets are often located at a local harbor or port (and thus are sometimes referred to as "dockside" markets), whereas farmers markets are located elsewhere in town.

These kinds of markets are temporary or fixed retail market events where space is obtained (sometimes for a small fee) for a specified day and time. Depending on the community and availability of product, the markets may take place weekly or monthly for a certain number of months or even throughout the year. Despite the market names, fishermen and growers can sell their products at both types of markets: fishermen's and farmers markets. However, some markets may have limitations about vendor type and the number of vendors selling the same product.

These styles of alternative markets offer a few benefits:

- 1) Markets tend to be well established in their communities and may provide general advertising to attract customers.
- 2) The diversity of vendors and products also typically attracts a larger and more diverse group of potential customers compared to more individualized markets like off-the-boat sales.
- 3) The regular face-to-face interactions with consumers can help build a loyal customer base, with the likelihood of expanding via word-of-mouth.

Note, however, that fees, insurance, time commitment and other requirements for vendors vary among individual markets.

CONSIDERATIONS

As with all alternative/direct markets, there are many things to consider before jumping in. Here are some questions to ask yourself and others when considering selling at this type of marketplace:

Product considerations

- What product style will you sell (fresh, frozen, value-added, other)?
- Will you be able to offer a portion size that will match what consumers will be willing to pay for (e.g., a whole fish versus small portions that will be a fraction of the cost)?
- Does the market operate at times when you have product available?
- If you have little or no catch one week, are you permitted to sell seafood caught by another fisherman?
- Does the market include enough seafood consumers to make it profitable for you?
- If other vendors are marketing the same product, will the demand be high enough to support you and the others?
- What will you do with product that does not sell?
- How will you keep your product cold, if necessary?
- Do you need to process your catch? If so, what additional facilities, supplies, equipment, personnel and permits are needed?

Market operations

- What are the market's rules and requirements?
- What is the application process, deadline and fees?
- Do you need to reapply each year or will your space be renewed automatically?
- Are you required to carry particular liability or other insurance?
- Who may and may not sell: fishermen, family members, local buyers, others?
- What times must you (or someone working with you) be at the market?

- Will you have easy access to your truck from your stall?
- Do you have the proper equipment and supplies to maintain safe, high quality product while handling, holding and selling it?
- How will you address additional seafood safety issues? What kind of control measures, monitoring procedures and records are needed to document the use of safe handling practices?

Fishermen's and farmers markets are started and overseen by various groups with different application requirements. Fishermen's markets are few and far between, but more locations are being developed each year. In California, the Pacific to Plate law was enacted to streamline the process enabling those that fish and farm seafood to sell their products directly to consumers in a way similar to farmers markets. Guidance documents were then developed to clarify how to organize and participate in fishermen's markets in ways that meet public health requirements. Visit California Sea Grant's website for the guide, "How to Participate in a Fishermen's Market."

Typically, a successful fishermen's market includes multiple fishermen and growers participating as vendors selling their different products (fished and farmed), because it increases the likelihood that there will always be some product available. Product availability is a key consideration for deciding whether this market type is right for a community and/or yourself, and for setting the frequency of the market.

Farmers markets may also be a place to sell your seafood directly to consumers. However, selling seafood at this type of market may require additional approvals. For example, in California, the farmers market organizer and county environmental health department must approve having a seafood vendor at the market. This special approval is necessary because this type of market is specific to sales by 'certified farmer producers,' which does not include fishermen. It is best to reach out directly to the farmers markets you want to sell at to learn more about the opportunities for selling seafood there.

FINDING OR STARTING A MARKET

If you are looking for an established fishermen's or farmers market (i.e., a market where seafood vendors are already active) to sell your product, visit Sea Grant's "Discover West Coast Seafood" website. If you are interested in finding a location to start a new fishermen's market, consult with your state's Sea Grant extension

specialists/advisors as they may have information about which harbors are interested in having a market. The California guidance document will also help with understanding requirements for site identification and planning. For locating a farmers market where you might be able to sell your product, check the listings for certified farmers markets in your state.

Washington Find a Farmers Market

<https://wafarmersmarkets.org/washingtonfarmersmarketdirectory/>

Oregon Regular Season Markets

<https://www.oregonfarmersmarkets.org/in-person-markets>

California Certified Farmers Markets by County

<https://www.cdfa.ca.gov/is/docs/CurrentMrktsCounty.pdf>

If you are interested in working with farmers to establish a new Farmers' Market refer to the state guidance documents.

Washington Starting a Farmers Market

<https://wafarmersmarkets.org/starting-a-farmers-market>

Washington Department of Fish and Wildlife

For the two guidance documents below, contact:

commercialsales@dfw.wa.gov

- WDFW Commercial Fisheries Contacts
- WDFW How to Sell Seafood Dockside in Washington

Oregon Starting and Managing Your Market

<https://www.oregonfarmersmarkets.org/starting-a-farmers-market>

California Who We Are – California Farmers Markets Association

<https://www.cafarmersmkts.com/about#about-cfma>

Participating in a fishermen's or farmers market is somewhat similar to selling your product off-the-boat. In particular, much of the same equipment is needed and tips for connecting and talking with potential customers are similar. Visit Chapter 11 on off-the-boat sales and onboard processing to gain additional tips and recommendations useful for participating in fishermen's and farmers markets.

Consult with resource management, public health and business authorities before selling your seafood. In some states, requirements for selling to the public are different from those for selling to retailers, chefs and other food providers (see Appendices E–H) and the "Market Your Catch" website at <https://marketyourcatch.msi.ucsb.edu/> for updates.

Chapter 13

WORKING WITH A BROKER OR TRADER*

Adapted from "Working with a Broker or Trader," Alaska Sea Grant Marine Advisory Program, 2010, Sunny Rice, Quentin Fong and Glenn Haight

A seafood broker or trader can be an important partner for the direct market fisherman. Brokers and traders are experienced at selling fisheries products and often have access to markets others may not. They can also source additional product from other producers to create the volumes and product assortments desired by markets. There are important differences between brokers and traders.

BROKERS

A broker sells your product for you to buyers further up the distribution chain such as distributors, retail operations and importers. When you engage a broker, you outsource your marketing function, including sales and promotion responsibilities. The broker makes the sale, arranges logistics, and secures payment; you own the product until it reaches the buyer. Brokers move product to retailers and food service or secondary processors but do not sell directly to consumers.

A broker's commission depends on the type of product, volume and market location. For high-volume commodities, brokers command 3 to 5 percent of the sales price. Handling lower volumes and/or selling to foreign markets can push the commission higher.

Reasons to work with a broker

- Leaving the marketing and selling to someone else allows you to focus on production.
- Brokers know about markets that most of us have little expertise in.
- Brokers develop expertise in market research, logistics, pricing, negotiation and promotion (e.g., advertising, branding). These attributes are even more important when working in a foreign market.
- If meeting new people and making sales are not your strengths, a broker is a good solution.

You can work with more than one broker at a time, but only if they are not in competition and are aware of what you are doing. Using different brokers is acceptable for

different species, product forms and/or sales regions. Regardless of the circumstances, it is important to have a clear delineation of product, volume and/or territory. Open communication and transparency between the producer and broker are essential.

For export sales, an international broker will help guide you through the maze of import/export regulations. This includes things like obtaining European Union HACCP numbers, registering with the appropriate authorities or preparing health certificates. With these added burdens and increased knowledge, international brokers will charge a higher commission.

Disadvantages to using brokers

- Brokers are middlemen, and the cost of their services comes out of your price.
- You can become "locked in" to a broker. For example, if a volume of product is committed to a broker specializing in food service, you may not be able to redirect that product to take advantage of price increases in the retail market without souring the broker-supplier relationship.
- No matter how devoted a broker is to the product, he or she may not represent it exactly the way you would like. For example, the broker may market the product based on price while you are focused on quality.
- Finally, your product is likely one of many the broker represents. The broker may decide to focus on more profitable products at the expense of yours.

THE DIFFERENCE BETWEEN A BROKER AND A TRADER

A trader (otherwise known as a distributor) performs many of the same functions as a broker. The difference is the trader buys the product from the producer rather than representing the product and facilitating sales.

- **Risk** - By buying your product up-front, traders take on the risk of the product losing value from changing market values, spoilage or other factors. They also cover the span of time between when the product is delivered to the customer and when payment is received from that customer. A large amount of capital may be required to cover this time span. In exchange for absorbing these risks, a trader pays less for the product but does not collect a commission.

In deciding whether to use a broker or trader, consider whether the risks appear low enough and the product value high enough to justify retaining direct ownership. The broker or trader will be considering the same thing.

- **Payment method** - Although traders pay you directly, they generally do not pay cash up-front. Instead, they give letters of credit from a bank. The letters of credit are payable when the trader gets delivery of the product. If the seafood buyer is in Seattle, for fresh product delivered quickly payment may be issued in a day or two. However, a producer selling to a seafood trader in Germany, for example, might have to wait a few weeks for payment.
- **Marketing information** - Unlike a broker, a seafood trader is not obliged to provide market information, although some might if you have developed a long-term relationship. The trader will likely only negotiate a price and may give feedback on the product quality to justify the quoted price.

It is common for an individual operating as a broker to move some product as a trader and vice versa.

FINDING A BROKER

A quick internet search for “seafood broker USA” or “seafood trader USA” will turn up dozens of listings. Many brokers set up booths at seafood shows. Talk to other direct marketers for referrals.

Two online services can help you in your search. Urner Barry’s platform, called Prospector, is a subscription search engine that combines all animal protein industry professionals. The other is the Trade-Seafood Industry Directory. The international edition can be found at <http://www.trade-seafood.com/directory/seafood/agents/>. The USA-specific edition can be found at <http://www.trade-seafood.com/directory/seafood/country/usa.htm>.

When you talk to potential brokers, ask for customer references and call a few of those references. If possible, meet with the broker face-to-face to get a better feel for the person and how the operation works. Developing this personal relationship early on will help you establish the right kind of sales reputation for your product.

Check individual brokers’ credit histories through credit services such as Dun and Bradstreet (<http://www.dnb.com>) and Seafax (<http://www.seafax.com>), which specialize in credit information for the food industry.

Brokers have expectations. They need a consistent supply of quality product, as do their customers. They need frequent communication about product quantity and availability, and to arrange shipments. Good brokers look at their dealings with producers as relationships, which include trust and commitment. It is important to be confident your broker is providing strong representation, however, refrain from undermining your broker’s decisions, micromanaging or second-guessing them. Brokers are paid for their marketing expertise—let them use it.

AVOIDING PROBLEMS WITH A BROKER

Although the broker-client relationship depends on trust, you may want to take steps to protect yourself early in the relationship:

- Sign on with a broker for a trial period, such as six months to a year. Normally there are no contracts, so this is likely to be a verbal agreement.
- Consider using a local broker, or a broker at the first transfer point for your product (e.g., Anchorage or Seattle). This will make communication easier and decrease your risk.
- Maintain multiple sources of information about markets and prices.
- Be prepared and organized with your paperwork. Record weights and numbers on each box, have copies of invoices, airway bills, etc. This is good business practice and provides evidence in case of a dispute.
- Develop a backup plan in case the broker doesn’t work out.

TERMS TO KNOW WHEN DEALING WITH A BROKER OR TRADER

Bill of lading: a document prepared by the shipping or transportation company accepting goods for shipment and providing a contract to carry the goods to the designated destination. A bill of lading may contain information such as the item type, quantity, value, date, port, seller name, vessel details, etc. The seller can claim

payment and the buyer can take delivery of the goods based on this contract.

C&F: cost and freight (C&F) signifies that a price quoted includes all expenses incurred up to the named destination except insurance (e.g., “C&F Seattle”).

CIF: cost, insurance, freight (CIF) is the same as above, but the cost of insurance is also included.

Consumer: the final user of the product (e.g., families, restaurant customers).

FOB: freight on board or free on board (FOB) usually indicates who pays freight, insurance and loading costs. For example, a quoted fee “FOB Seattle” would mean you pay for the insurance and shipping of the product to Seattle. The broker’s percentage would then be taken off the final price received for the product after it is sold.

Food service provider: a business that serves prepared food to consumers, for example, restaurants, cafeterias, universities and government institutions.

Freight forwarder/expediter: a person or a firm that arranges for your shipment of goods to be transported efficiently. For example, once your container is loaded

and closed up, a forwarder will pick it up, schedule transportation, clear customs, and ensure delivery at a certain date and time.

HACCP: Hazard Analysis and Critical Control Point (HACCP) is a methodology contained in some regulations that spells out the means for reducing risk of contamination or other health threats.

Letter of credit: a written commitment from a buyer’s bank or other financial institution to a seller’s bank guaranteeing payment when certain terms are met.

Retailer: an entity (e.g., a grocery store or specialty food shop) that sells product directly to the consumer for home consumption.

Wholesaler: an entity that buys larger quantities of product and breaks them down into smaller orders to resell to retailers or food-service outlets. Wholesalers may also reprocess or repackage product. Wholesalers can be regional or national; usually have their own means of distributing products (e.g., trucks, warehouses, or repackaging facilities); and often carry a wide range of products.

Notes

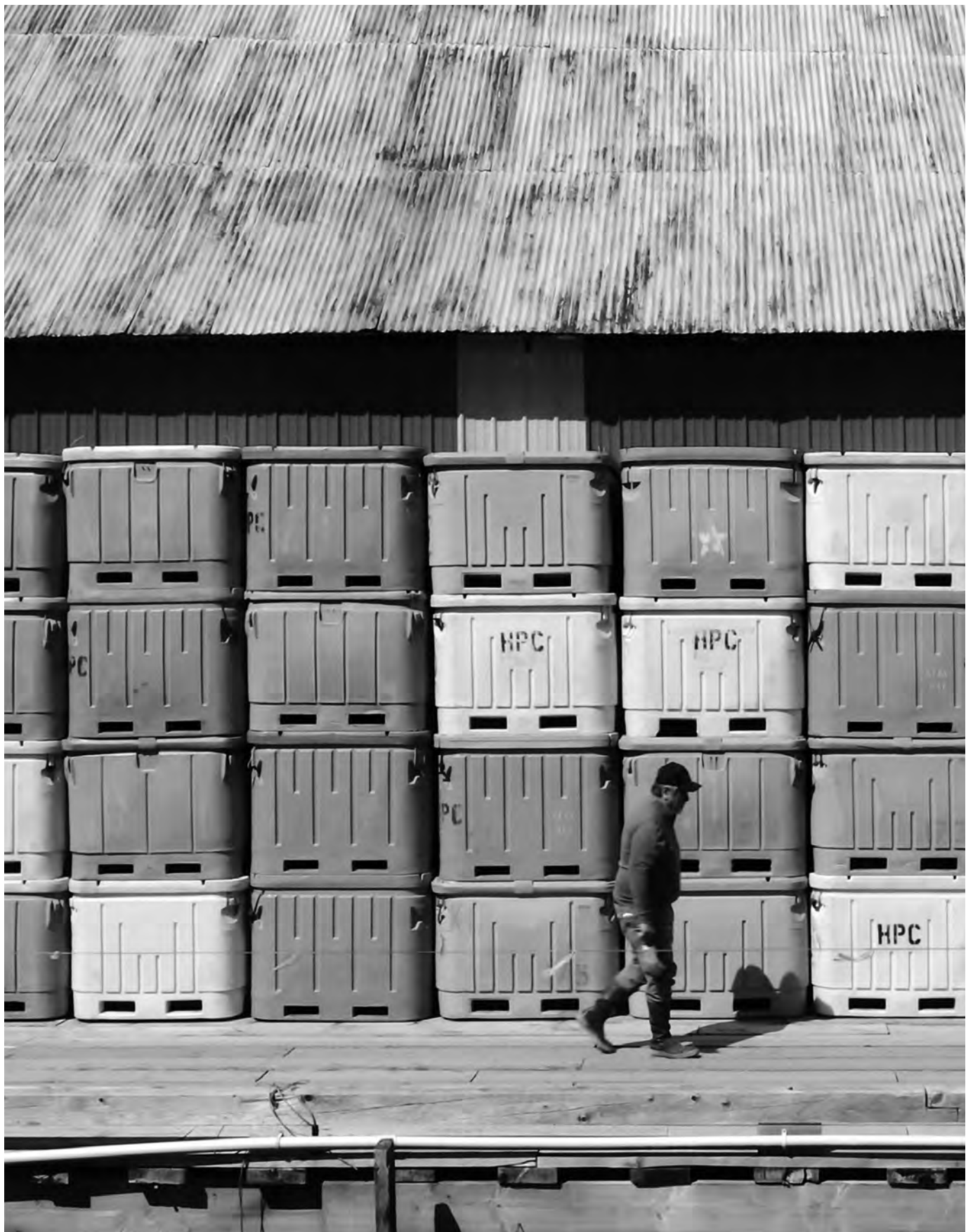


Photo Courtesy of Alaska Seafood

Chapter 14

WORKING WITH A CUSTOM PROCESSOR

Some direct marketers work with custom processors. They may lack processing equipment on their boats, may need to handle bigger quantities of product, may want to offer their customers different product forms, or they may not want the responsibility of conducting their own processing operation. A custom processor can provide various value-added services such as smoking, freezing, drying, portioning, canning and others.

A custom processor can help you identify all your operational costs so you can develop appropriate selling prices that will allow you to make a profit.

CONSIDERATIONS FOR WORKING WITH A CUSTOM PROCESSOR

- **What are the benefits?** Working with a custom processor to process and package your product may allow your business freedom to focus on harvest and sales activities.
- **Is the custom processor affordable?** The service a custom processor provides is a cost to your direct marketing business. A thoughtful business feasibility analysis considering the profit margins and risk incurred in different scenarios will help you decide whether a custom processor will give you the return on investment you need for your business.
- **Does the custom processor have the capacity to process your fish?** Some processors provide exclusive areas in their plant and crews for custom processing that are separated from other processing activities; others may rely on marked totes to differentiate fish ownership, and your fish will be processed as a batch along with other fish. Become familiar with your processor's system.
- **What product forms do you require?** Research which processors offer your desired processing methods and compare different pricing and requirements, fulfillment timing, etc. Consider processing your catch into a shelf-stable product such as cans or pouches. Having a shelf-stable product can relieve logistical burdens associated with keeping fish cold and fresh until final sale.
- **What certifications does the processor possess?** HACCP certification is the bare minimum. Other certifications include Global Food Safety Initiative (GFSI), U.S. Department of Commerce (USDC), Costco, and various ethics and compliance audits.
- **How will fish be handled—over the dock or on a tender, and how am I assured I will get my own fish?** Traceability may be very important to you. Understand how your processor tracks your fish from delivery through processing and shipping.
- **Who will pay applicable state and local taxes?** If, for example, you sell your fish to a processor and subsequently buy the fish back in a custom processed form, the processor may be the one paying taxes, and they will include those charges in your final bill. Check with your state revenue or tax department for details.
- **Who will provide packaging and labeling?** Some processors will use your packaging; others want to ship product in their own boxes. Some processors can store your materials but not all. There are many requirements for federally approved labels. Your processor will know what these are and will be able to explain them to you.
- **Is the custom processor required to put their name on the product or shipping label?** In Alaska, the last certified handler of a seafood product before it is released for commercial or retail sale is required to place their processor code on the shipping box or product label. In all states, USDC certified plants are required to place the certification number on the seafood label. Discuss this point with your processor.
- **Who will pick up and transport the product to the next stop once it is ready?** Most processors aren't warehouses or cold-storage facilities. Make sure you

understand how much time you have to move the product out of the processor's facility and how to get your transporter to work with the processor.

- **What is the processor's billing cycle?** What form of payment do they accept? Some processors require payment before they will release the product, and others will bill you.

GET IT IN WRITING

Although some business agreements in the seafood industry rely on a relationship and handshake, it's best to write an agreement or contract with your custom processor outlining the services to be provided. This can be as simple or complex as you and your processor desire. Like a written business plan, a written contract clarifies expectations, anticipates problem areas and keeps things flowing smoothly.

TRADITIONAL PROCESSORS ARE POTENTIAL PARTNERS

Lastly, don't overlook your traditional processor as a potential partner in your direct marketing venture. Even if they aren't set up to custom process, they may help you order supplies or equipment and share shipping costs. Some processors are not interested in supporting someone who could be seen as a direct competitor, but many large processors are encouraging direct marketers. Often, markets you are selling into are not the same as retail customers that buy directly from larger processors, seafood distributors and brokers. Some large processors feel that the more high-quality wild seafood from any source is available to the marketplace, the better everyone in the wild seafood business will be.



Photo Courtesy of Oregon Sea Grant

Appendix A

FEDERAL IFQ HALIBUT, SABLEFISH AND GROUND FISH PROGRAM

*Nathan Lagerwey, Deputy Special Agent in Charge of Alaska
NOAA Fisheries Office of Law Enforcement*

Fishermen who legally harvest halibut and sablefish under the IFQ program may direct-market their catch provided they comply with all the pertinent state and federal regulations. It is the business owner's responsibility to be aware of all regulations. Federal regulations are summarized below. To find out more about federal regulations, contact any NOAA Fisheries Office of Law Enforcement office. Non-IFQ groundfish likewise may be direct-marketed if pertinent regulations are met. See the final section of this appendix for groundfish regulations.

IFQ Permits: An IFQ permit authorizes participation in the fixed-gear commercial fishery for Pacific halibut off Alaska and most sablefish fisheries off Alaska. IFQ permits are issued to persons and are not specific to vessels, but are specific to a vessel category and IFQ regulatory area. Permits are issued annually to persons holding fishable Pacific halibut and sablefish quota.

Processing: The processing definition for sablefish includes cooking, canning, smoking, salting, drying and freezing but does not mean icing, bleeding, heading or gutting. Only Category a sablefish may be processed at sea.

Category a halibut IFQ permit holders may freeze halibut whole at sea. All processed halibut must be gutted and gilled and may be headed. However, halibut may not be filleted or further processed prior to landing.

Prior Notice of Landing (PNOL): The operator of any vessel making an IFQ landing must notify NOAA Fisheries Office of Law Enforcement (OLE) no fewer than 3 hours before landing IFQ halibut or IFQ sablefish. This PNOL must be made to the OLE Data Clerks at 800-304-4846 (select option 1) between the between the hours of 0600 and 2400 Alaska local time, A.L.T. a PNOL must contain information as listed by the regulations. Troll bycatch of less than 500 pounds IFQ halibut does not require a PNOL. The purpose of the PNOL is to facilitate enforcement monitoring and biological sampling by the International Pacific Halibut Commission (IPHC) and/or auditing by NOAA Office of Law Enforcement.

A Registered Buyer Permit is required to receive IFQ halibut or sablefish or CDQ halibut from a harvester. It is unlawful to make an IFQ halibut or sablefish landing other than directly to (or by) a Registered Buyer. a Registered Buyer Permit is also required for transfers of fish outside of an IFQ regulatory area or outside the State of Alaska.

A fisherman may obtain a Registered Buyer Permit and become his/her own permitted receiver of IFQ fish. a fisherman who legally harvests IFQ halibut or sablefish may transfer (including selling) catch to entities other than permitted fish processing facilities if she/he has a Registered Buyer Permit and complies with the recordkeeping and reporting requirements of that permit. Registered Buyer Permits are nontransferable, issued annually, on request and at no cost. Registered Buyer Permit applications are available at https://media.fisheries.noaa.gov/dam-migration/application-for-ifq_cdq-registered-buyer-permit-akro-noaa-fisheries.pdf

Once one IFQ fish is offloaded, all fish of that species (halibut and/or sablefish) must be offloaded from the vessel at that site, weighed and debited from the IFQ permit holder's account from which the catch was harvested. The vessel operator is legally responsible for offloading fish. Once landing operations have commenced, the IFQ cardholder and the harvesting vessel may not leave the landing site until the IFQ account(s) is properly debited. The offloaded IFQ species may not be moved from the landing site until the IFQ landing report is received and the IFQ cardholder's account is properly debited.

Landing report: Registered Buyers must report all IFQ landings online. An IFQ landing may commence only between 0600 and 1800 hours, A.L.T., and the offload must be continuous and completed at a single landing site. Electronic landing reports must be submitted to OLE using the online landing system, eLandings. Access and instructions are provided with the issuance of all Registered Buyer Permits. It is the responsibility of the Registered Buyer to obtain hardware, software and internet connectivity to support internet reports as required.

The IFQ permit holder must initiate a landing report using his or her own permit. The Registered Buyer must accurately submit all information. An IFQ landing report must be completed within 6 hours after the completion of the IFQ landing, prior to shipment of said fish away from the landing site, and prior to departure of the delivery vessel from the landing site. If unprocessed IFQ halibut or IFQ sablefish is offloaded from a vessel, the scale weight of the halibut or sablefish actually measured at the time of the offload is required to be reported on the IFQ landing report.

For processed IFQ sablefish or frozen IFQ halibut (“A” category quota share only), the scale weight of the halibut or sablefish may be measured at sea or at offload. If the product scale weights are taken before the time of offload, then the species and actual product weight of each box or container must be visibly marked on the outside of each container to facilitate inspection.

After the Registered Buyer enters the landing data and a receipt is printed, both the IFQ permit holder and the Registered Buyer’s representative must sign the receipt to acknowledge the accuracy of the landing report. The Registered Buyer and IFQ permit holder must retain legible copies of the receipt.

Selling your own IFQ harvest: An IFQ holder wishing to sell their own IFQ harvest must obtain a Registered Buyer Permit and complete the landing requirements above using their own Registered Buyer Permit. The Registered Buyer Permit is required to transfer dockside and complete landing requirements. After properly landing, the Registered Buyer conducting sales must issue a receipt in lieu of a shipment report, which must include the date of sale or transfer, the Registered Buyer Permit number, and the product weight of the fish transferred to each individual receiving IFQ halibut or IFQ sablefish. These instructions do not cover retail sales.

IFQ departure report: a vessel operator who intends to make an IFQ halibut or IFQ sablefish, or CDQ halibut landing outside Alaska must submit an IFQ Departure Report, by telephone, to OLE at 800-304-4846 (select option 1) between the hours of 0600 and 2400 hours, A.L.T. The vessel operator must submit the Departure

Report after completion of all fishing and prior to departing the waters of the EEZ adjacent to Alaska when IFQ halibut, CDQ halibut or IFQ sablefish are on board. The vessel operator submitting an IFQ Departure Report must also have an IFQ Registered Buyer Permit and must submit landing reports for all IFQ halibut and sablefish on board at a single landing location. The vessel operator submitting an IFQ Departure Report must ensure that one or more IFQ cardholders are on board with enough remaining IFQ balance to harvest amounts of IFQ halibut, CDQ halibut or IFQ sablefish equal to or greater than all IFQ halibut, CDQ halibut and IFQ sablefish on board. The vessel operator must provide the information on the IFQ Departure Report as listed in the regulations.

IFQ fees: The Cost Recovery percentage is set annually. In 2023, the fee was set at 3.0 percent of the ex-vessel value of IFQ harvested. Fee Summaries (billings) are mailed to IFQ permit holders in November. Payments are due by January 31.

A Registered Buyer who also operates as a shoreside processor and receives IFQ landings of sablefish or halibut must submit a complete IFQ Buyer Report to NMFS annually not later than October 15 following the reporting period in which the IFQ Registered Buyer received IFQ fish.

Observer fees: a Registered Buyer or processor named on a Federal Processing Permit who receives groundfish or halibut is subject to the observer fee. The Registered Buyer or Federal Processing Permit holder is responsible for collecting fees from harvesters during the calendar year in which the groundfish or halibut is received. Observer fee payments must be submitted to NMFS no later than February 15 of the year following the calendar year in which the groundfish or halibut landings subject to the observer fee were made.

Beginning in 2021, the observer fee percentage is set in regulation at 1.65 percent of the standard ex-vessel price. Electronic payments are accepted through the NMFS Alaska Region website, <http://alaskafisheries.noaa.gov>

State sablefish fisheries: Federally permitted IFQ sablefish fishermen commercially fishing for sablefish in a State sablefish fishery must debit their catch against an IFQ account. If any person on board the vessel holds IFQ sablefish quota during the fishing trip, regardless of the IFQ area of the quota share and of the remaining account balance, the state sablefish weight must be debited against the permit. Alaska’s Prince William Sound and limited entry sablefish fisheries are not subject to IFQ regulations or the requirements set forth in regards to the state sablefish fishery.

Vessel activity reports: Catcher vessels greater than 60 feet length overall, all catcher/processors, and all

motherships holding a Federal Fisheries Permit and carrying non-IFQ fish products onboard must complete and submit a Vessel Activity Report (VAR) by fax or email at 907-586-7313 or enf.dataclerk@noaa.gov before the vessel crosses the seaward boundary of the EEZ off Alaska or crosses the U.S.–Canadian international boundary between Alaska and British Columbia.

GROUND FISH, IFQ AND CDQ RECORDKEEPING AND REPORTING

Recordkeeping and reporting requirements could include:

- Daily Fishing Logbooks (DFLs); Daily Cumulative Production Logbooks (DCPLs) (approved electronic logbooks can be substituted for DFL and DCPL requirements); or for halibut, IPHC or IPHC-approved logbooks or electronic logbooks (ELBS)
- Product Transfer Reports (PTRs) (see below)
- Check-in/Check-out reports
- Vessel Activity Reports (VARs)
- IFQ Departure Report
- Prior Notice of Landing (PNOL)
- Transshipment Authorization
- Daily Production Reports
- Commercial Operator's Annual Report
- Landing Reports (eLandings or tLandings)
- CDQ Vessel Registration

(Consult the regulations for descriptions and requirements. See 50 CFR § 679.5 Recordkeeping and reporting)

Product Transfer Report (PTR): Except as specifically exempted, federally permitted processors and IFQ Registered Buyers must complete and submit to the NOAA Fisheries Office of Law Enforcement (OLE) a separate PTR for each transfer of groundfish, IFQ and CDQ fish from their possession. PTRs must be completed within two hours of the transfer and must be submitted to OLE in Juneau by noon on the Tuesday following the end of the applicable weekly reporting period (Sunday through Saturday) in which the transfer occurred. They can be submitted by fax (907-586-7313), or by email (enf.dataclerk@noaa.gov). Office of Law Enforcement phone number is 907-586-7225.

PTR Exemptions

1. *Exemption: Bait sales (non-IFQ groundfish only)*

During one calendar day, the operator or manager may aggregate and record on one PTR the individual sales or shipments of non-IFQ groundfish to vessels for bait purposes during the day recording the amount of such bait product shipped from a vessel or facility that day.

2. *Exemption: Retail sales—IFQ halibut, IFQ sablefish, CDQ halibut and non-IFQ groundfish*

The operator, manager, or Registered Buyer may aggregate and record on one PTR the amount of retail product of IFQ halibut, IFQ sablefish, CDQ halibut and non-IFQ groundfish transferred during one calendar day if each sale weighs less than 10 lb or 4.5 kg

3. *Exemption: Wholesale sales (non-IFQ groundfish only)*

The operator or manager may aggregate and record, on one PTR, wholesale sales of non-IFQ groundfish by species when recording the amount of such wholesale species leaving a vessel or facility in one calendar day, if invoices detailing destinations for all of the product are available for inspection by an authorized officer.

4. *Exemption: Dockside sales*

A dockside sale may be PTR exempt if the Registered Buyer conducting dockside sales issues a sales receipt to each individual receiving IFQ halibut, CDQ halibut or IFQ sablefish in lieu of a PTR. This receipt must include:

1. Date of sale
2. Registered Buyer Permit number
3. Weight by product of the IFQ halibut, CDQ halibut or IFQ sablefish transferred

A Registered Buyer must maintain a copy of each dockside sales receipt.

5. *Exemption: Transfer directly from the landing site to a processing facility (not applicable to groundfish).*

A PTR is not required for transportation of unprocessed IFQ halibut, IFQ sablefish, or CDQ halibut, directly from the landing site to a facility for processing, provided the following conditions are met:

1. A copy of the IFQ landing report receipt (Internet receipt) documenting the IFQ landing accompanies the offloaded IFQ halibut, IFQ sablefish, or CDQ halibut while in transit.
2. A copy of the IFQ landing report receipt is available for inspection by an authorized officer.
3. The Registered Buyer submitting the IFQ landing report completes a PTR for each shipment from the processing facility.



Photo Courtesy of Alaska Seafood

Appendix B

HACCP AND DIRECT MARKETING*

*Original contributor: Liz Brown
Alaska Sea Grant Marine Advisory Program (formerly)*

HACCP stands for Hazard Analysis and Critical Control Point, a process used to ensure food is processed safely. It is also a federal regulation. Your relationship with HACCP, if any, will depend on the type of direct marketing you do.

All seafood processors are required to conduct a hazard analysis (the “HA” part of HACCP) for each of their products. If a critical control point (the “CCP” part) is found, monitoring and recordkeeping for how that hazard will be controlled needs to be written into a HACCP plan. Note that catcher–sellers are not defined as processors, so they are not subject to this rule. Similarly, if the processing, packaging and handling of your product is done by a third party already covered by a HACCP plan, such as a custom processor, you do not need to duplicate those efforts.

If you are processing your own catch, you will need to conduct a hazard analysis. In Alaska, the hazard analysis must be in written form. If your hazard analysis reveals that hazards are reasonably likely to occur, you’ll need to prepare a HACCP plan.

Following are some common mistakes in HACCP that may pertain to direct marketers. The complete set of PDF documents, Common Mistakes in HACCP, for different subjects can be found in the Alaska Sea Grant online bookstore, <http://seagrant.uaf.edu/bookstore>. This information is intended to supplement HACCP training, which is available through the Alaska Sea Grant Marine Advisory Program.

Note that occasionally regulations change and they are subject to interpretation by consumers and agencies.

MISTAKES PERTAINING TO HAZARD ANALYSIS

- **Not having a written hazard analysis.** The federal regulation requires a hazard analysis but does not require a written document. The Alaska regulation requires a written document.
- **Missing hazard analysis parts.** a hazard analysis has three parts. The product description should include the species (using the scientific name will prevent confusion; the FDA “Fish List” of acceptable names can be found at <https://www.cfsanappsexternal.fda.gov/scripts/fdcc/?set=SeafoodList>), form (i.e., frozen, cured, fresh) and the intended consumer. a hazard analysis should include a drawn flowchart based on different parts of the plant, individual machines, and the addition of anything that touches the product, including packaging material, ingredients, process water, ice, etc. a narrative description of the flow chart should include additional information. It is acceptable to combine products in one hazard analysis only if the hazards, critical control points, critical limits and production methods are identical.
- **Too many or too few critical control points.** Two common mistakes when performing a hazard analysis on your product both arise from ignoring the Hazards and Control Guidance (<https://www.fda.gov/food/hazard-analysis-critical-control-point-haccp/seafood-haccp>). In your product flow, you may have many monitoring points where the information may or may not be recorded, but these should not be defined as critical control points. Go through the Hazards and Control Guidance and note which hazards are associated with your product in both the species list and the product form list, then address those hazards. In every product form, metal inclusion and allergens are listed as potential hazards. Your hazard analysis should mention both of these even if only to explain why they are not likely to occur.
- **Combining different processes of the same species in the same hazard analysis.** It is permissible to combine products in the same hazard analysis if the hazards and control methods are identical. However, you will want a combination like this only if the process is similar enough to be entered in the same flow chart. For instance, cod fillets and headed and gutted cod are processed in the same fashion, with one step added

for fillets, while salmon fillets and salmon roe are processed very differently.

- **Not updating your hazard analysis.** The regulation requires you to reassess your hazard analysis after any substantial change, such as new equipment or a new recipe, to your plant or process. If you have a HACCP plan, you are required to reassess it every year and after such changes.
- **Not signing the document.** If you have a HACCP plan, it must be signed and dated by someone with authority to represent the firm. Generally, this is the plant manager or somebody higher in the corporate structure. The signature and date will show that the plan has been reassessed annually as required.
- **Not reviewing and signing the records.** If you have a HACCP plan, the records must be reviewed and signed within a week by a HACCP-trained or equivalently knowledgeable person. You should review the records prior to this, however, because if there is a problem, you will want to discover it as soon as possible.

MISTAKES PERTAINING TO AGENCY JURISDICTIONS OR REQUIREMENTS

- **Thinking you are required to have a HACCP plan if you're not.** You are required to perform a hazard analysis on each of your different species and processes. You need a HACCP plan only if your hazard analysis reveals hazards that are reasonably likely to occur. a hazard analysis is not the same thing as a HACCP plan.
- **Thinking you need a certificate of training.** Attending HACCP training is one way to become familiar with HACCP information. You do not need a certificate confirming that you have attended training, but you do need to demonstrate to your inspector that you understand the concepts of HACCP. There is one exception: if your company is a participant in the U.S. Department of Commerce HACCP/Quality Management Program, you will be required to have someone in the facility who has successfully completed HACCP training.
- **Not having a HACCP-trained or equivalent person reviewing your HACCP records.** The person who reviews the HACCP records is required to be knowledgeable about HACCP, whether formally trained or self-taught as previously described. HACCP records must be reviewed within one week of the day that the records are made. Unless your vessel is heading back to port that often, you need someone on board who understands HACCP.

- **Not reading the regulation or the Good Manufacturing Practices.** Reading the six pages of regulations will answer many of your questions. The regulations are in 21 CFR parts 123.6-12, which can be found at along with the rest of the Procedures for the Safe and Sanitary Processing and Importing of Fish and Fishery Products. Regulations and Good Manufacturing Practices are in 21 CFR, which can be found at <https://www.fda.gov/food/seafood-guidance-documents-regulatory-information/fish-and-fishery-products-hazards-and-controls>.

- **Being confused about the agencies that deal with seafood HACCP.**

FDA. The Food and Drug Administration is within the U.S. Department of Health and Human Services. The FDA is authorized to enforce the federal Food, Drug and Cosmetic Act, which regulates the production and distribution of seafood. The FDA's mandatory seafood HACCP rule is about seafood safety only.

USDA. The U.S. Department of Agriculture is responsible for inspecting meat but not seafood products as authorized by the Federal Meat Inspection Act. There is a separate HACCP program for meat.

NOAA Fisheries. The National Oceanic and Atmospheric Administration is within the U.S. Department of Commerce. Also known as the National Marine Fisheries Service, NOAA Fisheries provides a fee-for-service seafood inspection program that includes economic integrity, quality and wholesomeness along with seafood safety in its voluntary seafood HACCP program.

EPA. The U.S. Environmental Protection Agency is concerned only with HACCP in that it sets tolerance levels for certain food contaminants.

ADEC. The Alaska Department of Environmental Conservation has adopted the federal HACCP rule as well as imposing several rules unique to Alaska. They issue seafood processing operating permits, enforce regulations, and approve any new processes and technology. In other states, safety inspection agencies perform these functions.

MISTAKES CONCERNING SANITATION STANDARD OPERATING PROCEDURES (SSOP)

- **Not having a written SSOP.** The federal regulation requires a written sanitation plan, while the Alaska regulation says you should have a plan. Neither one says you shall have a written plan (note the difference between "should" and "shall") but it's pretty clear that you should.

- **Not keeping sanitation records.** Both federal and Alaska regulations require that you keep sanitation monitoring records.
- **Not reading the regulation.** You can find SSOP requirements at <https://www.fda.gov/food/seafood-guidance-documents-regulatory-information/fish-and-fishery-products-hazards-and-controls>. It's CFR 21, Part 123, Section 11.
- **Ignoring additional aspects of process water safety.** It's easy to claim that your process water is safe if you have a valid disinfection program but don't forget that you'll need to check periodically (and keep records) to ensure that no cross-connections have arisen and that you have adequate back-flow prevention devices where necessary.
- **Ignoring your SSOP.** The whole point of having a sanitation plan is to help make sure your plant gets cleaned to your standards. Your SSOP is a method for expressing your intentions to your employees and for them to respond to you. If the plan doesn't match the procedures in the plant, or the records are grudgingly kept only because they are required, it's a waste of time.
- **Not updating.** Your SSOP should reflect what you actually do in the plant. You should have the person who is in charge of cleaning go through the SSOP periodically to check that they are actually doing what is in the plan, which includes keeping current the brands and instructions of cleaning chemicals in use.
- **Not including the eight points.** a typical sanitation plan is a list of equipment and areas to help your cleaning crew be efficient. This would address the second of the eight sanitation points. See "Sanitation Requirements" in Chapter 5.



Photo Courtesy of Alaska Seafood

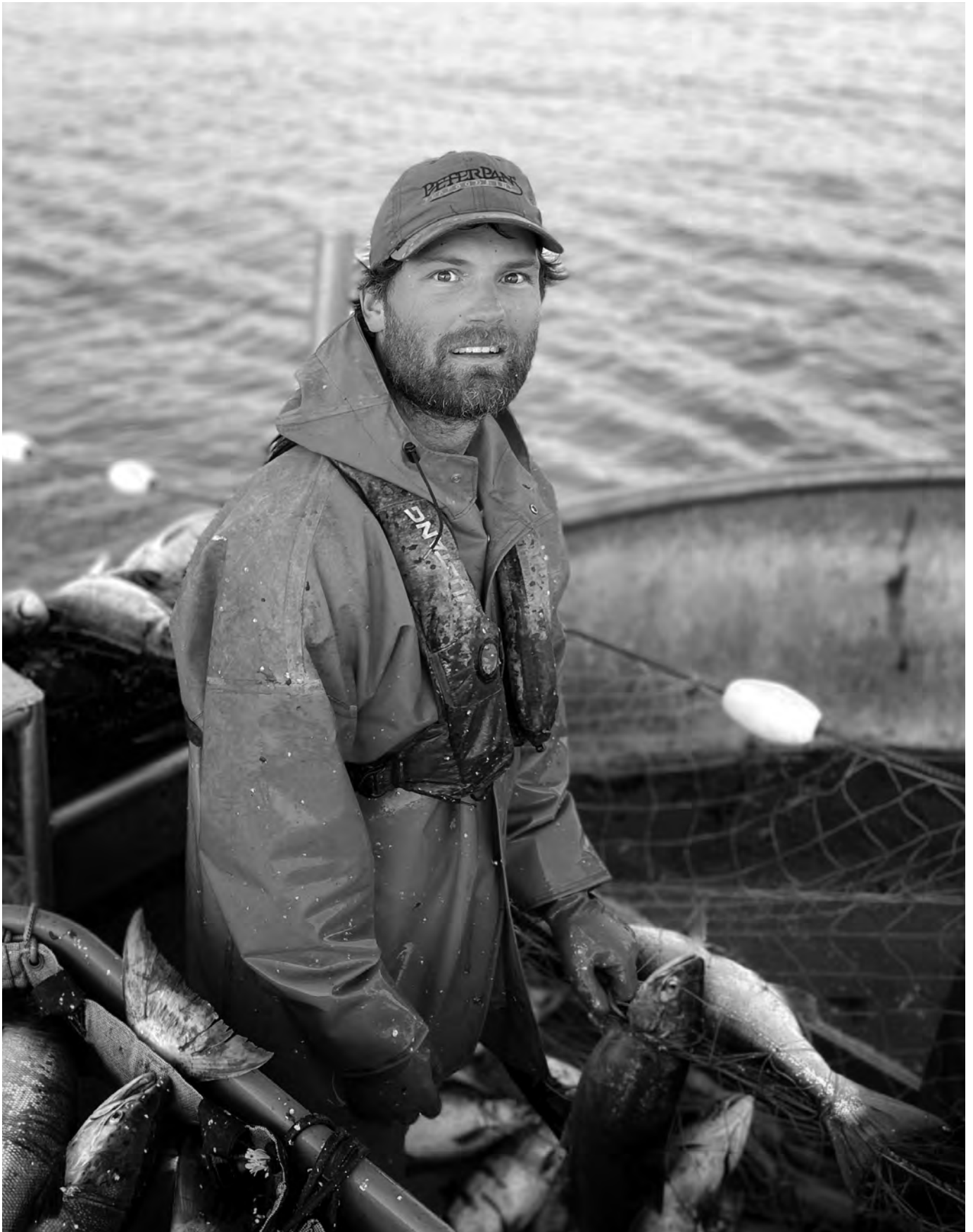


Photo Courtesy of Alaska Seafood

Appendix C

SALMON ROE*

*Original contributor: Terry Johnson
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Various kinds of roe—fish eggs—are valued in domestic and international seafood markets. Several Alaska species have potentially marketable roe, including pollock, cod, herring, capelin, smelt, some flatfish including rock sole, and all five species of salmon. Pollock and herring roe are processed on an industrial scale and marketed internationally. Salmon roe is too, but it also affords some potential opportunities to small-scale direct marketers.

First, some caveats. Roe is a delicate, highly perishable product, and one that is unfamiliar to most American consumers. Due to economic, political and demographic factors, roe values have declined over the last decade. Most roe products require precise processing. “Roe stripping,” or removing the roe and discarding the fish carcass, is prohibited by Alaska law. Currently no specialty salmon caviar company in Alaska is buying roe from fishermen. Relatively few fishermen have developed and sustained their own roe markets.

Some fishermen sell roe to bait processors (more on the bait market below), and some companies in the Lower 48 and abroad specialize in buying and selling roe. An opportunity remains for fishermen to develop domestic or export markets for caviar. Salmon caviar is valued in Japanese, Russian/Ukrainian and other European traditional cuisines. Immigrant communities inside the U.S., particularly Japanese, Jewish and Russian, consume small but growing amounts of salmon caviar.

Salmon roe is processed into any of three high-value “red caviar” products. Ikura, or salmon caviar, is lightly salted individual eggs. Sujiko is roe in the intact skeins. Ikura is roughly twice as valuable per pound as sujiko. It is made with large mature eggs, and requires more expensive and demanding processing. A third product, barako, consists of separated eggs from ikura processing. Most processed roe goes to Japan, Europe, Russia and Israel.

Specifications, packaging and marketing are very specific to the demands of those markets. Several steps are involved in making ikura, including brining and rubbing on specially sized screens to separate the eggs from the connecting tissue. Caviar processing requires specialized training and equipment.

The best ikura traditionally is made with chum eggs, but quality eggs of any of the five species can be used. Much

of the ikura currently produced in Alaska comes from terminal area fisheries and hatchery cost-recovery fish because of the ideal state of maturity. The bulk of the total salmon catch goes into ikura.

IKURA CONSIDERATIONS

Processing of salmon roe, especially ikura, is not practical for most direct marketers because of the need for a permitted processing facility with specialized equipment, and for extensive training and experience to make a product acceptable to the market. Some fishermen with larger vessels could process on board with the proper equipment and a processing permit. Most fishermen currently dealing in eggs are selling processors “green” (unprocessed) roe. Trollers and gillnetters who normally dress their fish may be able to sell the roe separately. For others the shift would require additional planning and effort. Here are some considerations:

- Department of Environmental Conservation (DEC) considers roe extraction to be processing, and **requires a processing permit.**
- You have to do something with the **carcasses** since it is illegal to roe-strip and dump the carcasses. Generally processors will not purchase fish without the roe, especially mature chums and humpies, but some buyers may take low-grade carcasses for use in inexpensive smoked products, fertilizer or garden mulch. The law doesn’t specify use as human food.
- **Quality control** is essential. Green roe buyers pay based on the grading report on the roe, and pay nothing for poor quality roe. Temperature and time out of the water are critical parameters, as is cleanliness of containers. Buyers generally won’t take green roe that’s more than two or three days old. Roe flies pretty well and some fishermen successfully send

roe to processors from remote landing ports, but they have to maintain strict temperature control.

- The demand for green roe is limited, if in fact any companies are buying it at all, so it is essential to establish a relationship with a processor before starting to fish. The processor will issue strict guidelines for handling and shipping the roe, and the fisherman's financial success hinges on strict adherence to those guidelines.

QUALITY TIPS

While the specifics of handling, packing and shipping have to come from the buyer, following are some general tips about handling salmon roe.

- Fish should be **bled** when they come on board and **dressed** as soon as possible. Be careful to avoid cutting into the guts while dressing the fish and removing the roe.
- **Wash the roe** with a 2 percent brine solution. Green roe should never come into contact with fresh water.
- Store roe in specified five-gallon plastic **buckets kept in slush ice**. When the buckets are full, seal them. Flake ice and refrigerated seawater (RSW) are not



Photo Courtesy of Alaska Seafood

suitable. Store the buckets in an insulated tote of slush.

- The fisherman should **sort roe** by species and keep them separated. Dark or soft roe should be discarded and never allowed to mix with good roe.
- Carefully sanitize buckets with the prescribed solution, and be alert to possible sources of contamination. Roe can pick up Salmonella, Listeria, and E. coli bacteria, which can cause serious illness.
- If you're flying out roe buckets, stay in the airport until you see them put into a cooler (not a freezer). If temperature increases at any point prior to processing, quality is seriously degraded.

BAIT

Salmon roe is popular for fishing bait. Several companies buy "green" (unprocessed) roe and process it for sale to trout, salmon and steelhead anglers. Quality standards for bait aren't as strict as for caviar, but the bait companies have their own specific requirements.

Some trollers freeze roe on board in their fish holds or chest freezers. Skeins must be clean and relatively free of blood and are packed in one-gallon Ziploc bags. Buyers prefer Chinook, coho and chum roe, and like skeins two fingers wide with eggs about pencil eraser size. Freezer boats hold their roe until the end of the season to bulk ship to buyers in the Lower 48.

Fresh roe may be acceptable provided it is no more than two or three days old but shipping costs (which normally the fisherman pays) are higher relative to value and the roe is more perishable. Fishermen who develop bait processor markets can realize net returns that may be twice as much per pound as they would get at dockside, if they can sell their roe at dockside at all.

Fishermen can make bait on their own, without concerns about processing permits and other regulations that pertain to human food products. However, usually there is an adequate supply of prepared sport fishing bait, so a direct marketer is advised to research the demand and pricing for bait before committing to bait processing.

For more information on quality roe recovery: Guide for Alaskan Roe Recovery Vessels, downloadable at <https://dec.alaska.gov/eh/fss/resources-printable/>.

For training in roe processing contact Dr. Gleyne Bledsoe, School of Food Science, University of Idaho/Washington State University, or Chris Bledsoe, Aquatic Foods International.

Thanks to Sissy Babich, formerly of Northern Keta Caviar, Ed Rice of Sunrise Bait, Chris Sannito of Alaska Sea Grant and Eric Norman of Taku Fisheries for past assistance with this content.

—5th Edition Editor

Appendix D

ONBOARD REFRIGERATION CONSIDERATIONS*

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PRE-CHILLING SYSTEMS

The systems used for chilling fresh seafood prior to air shipment include chilling rooms, cold storage blast freezers, slush ice, flake ice, chilled seawater (CSW) tanks and others. These systems can be classified as dry chilling (chilling rooms, vans and blast freezers) and liquid chilling (slush ice and CSW). Each has its advantages and disadvantages.

DRY CHILLING

Dry chilling methods consist of putting the product in a cold room, refrigerated van, blast freezer or similar system until the temperature is reduced to 32°F or slightly lower. This type of chilling has several disadvantages that may reduce product quality. Cooling is slow because air has a low heat transfer coefficient. Air circulation in vans and blast freezers can dry unprotected product surfaces, causing wet loss and dehydration. Using blast freezers for product cooling is discouraged because partial freezing can occur, damaging flesh texture. For the small shipper, these systems are expensive, because they require mechanical refrigeration and adequate space for the cooling equipment. However, dry chilling can be effective if the product is properly protected and carefully monitored.

LIQUID CHILLING

Liquid systems are more suitable for chilling fresh seafood. Slush ice consists of a container of ice and water in which the product is immersed until the temperature is reduced to 32°F or slightly lower. A variation to this method involves simply placing product in a melting layer of ice.

A CSW system uses an air pump and air distribution grid to agitate the slush ice mixture for rapid chilling. Chilling is much faster and more uniform. Liquid chilling systems can be set up anywhere and do not require expensive equipment, but do require a source of ice. A simple slush ice system can be prepared using a fish tote, water and ice. Sufficient ice should be added to initially attain the

temperature of 32°F and maintain this temperature during the chilling process.

Product should be added in increments to prevent crushing and to properly distribute product in the chilling liquid. Chilling will occur rapidly, usually within 30 minutes depending on the size of the items to be chilled and volume of product. Internal product temperatures should be taken to assure the desired temperature is reached.

A refrigerated seawater (RSW) system uses seawater with a mechanical refrigeration unit to keep it cold. Most RSW systems have a shell-and-tube heat exchanger in which refrigerant circulates through the tubes and seawater circulates around the tubes. RSW eliminates the need for ice, and a lower storage temperature can be used. With adequate capacity, the same refrigeration system can be used for brine immersion freezing.

A disadvantage of liquid chilling is that the water must be drained from the product before it is packed to prevent extra weight and the presence of unwanted water. Also, unless the chilled water is replaced often and containers frequently sanitized, liquid can introduce bacteria into product, particularly into the body cavity of cut fish, accelerating spoilage. It is recommended that chilled seawater be used for whole fish, not for fish that are dressed or partially dressed.

Seawater is heavy, so a RSW/CSW system weighs more than a dry or ice chilled system, potentially increasing draft and fuel consumption and reducing speed. Wet chilling requires a hold designed to contain the fluid under all operating conditions.

With the exception of a good high-capacity RSW system, the liquid chilling systems described are not capable of commercial quality freezing. Only high-capacity blast and plate freezers should be used for seafood products not intended for further processing. Equipment such as home freezers and walk-in freezers are designed only to maintain in a frozen state products that have already been frozen. Their freezing capacity is very low and even within that capacity, the rate of freezing is so slow that ice crystals form within the tissue cells, causing mushy texture and drip loss on thawing.



Photo Courtesy of Oregon Sea Grant

Appendix E

PERMITS, LICENSES, BONDS, REPORTING AND TAXES REQUIRED FOR ALASKA SEAFOOD DIRECT MARKETERS AND SMALL-SCALE PROCESSORS*

*Original contributors: Sunny Rice and Gabe Dunham,
Alaska Sea Grant Marine Advisory Program*

Once you do anything with a fish other than deliver it to a tender or processor's dock, you are in the highly regulated food industry. Like other food businesses, a direct marketer confronts a number of license, tax, inspection, and reporting requirements depending on the precise nature of the operation. This appendix summarizes pertinent Alaska and federal requirements as of late 2017. Use it for informational purposes only. For Washington, Oregon and California see other appendices.

Note: This is not a processing manual but because some direct marketing operations involve processing (see the definition below) this appendix includes information possibly of use to them. Do not consider it comprehensive. For a manual on starting a small-scale seafood processing operation, see a Village Processing Plant: Yes or No? available at <https://seagrant.uaf.edu/bookstore/pubs/M-89.html>.

Note: Regarding shellfish: this appendix does not address the processing or sale of bivalve mollusks such as clams, oysters, geoducks and mussels because a separate set of shellfish-related sanitation and processing regulations apply. Crustacean shellfish, specifically crabs and shrimp, are covered by the regulatory provisions outlined in this appendix.

Disclaimer: Requirements for seafood processing, handling and sales are complex and subject to change due to legislation or regulatory interpretation. State agencies use terminology specific to their regulatory requirements. Consult with each of the relevant agencies

for detailed and up-to-date instructions before engaging in seafood processing or sales activities.

If you have questions while completing permit or license applications, contact agencies early in the process. Establishing a good working relationship with agencies will help in resolving any problems that may arise later in the process. See the agency directory at the end of this appendix.

REGULATORY AGENCIES

In Alaska most types of fisheries business have to comply with the regulations of three main entities:

- Alaska Department of Fish and Game (ADF&G) regulates the take of fisheries resources and issues fisheries business licenses.
- Department of Environmental Conservation (DEC) ensures the safety of food products.
- Department of Revenue (DOR) collects fisheries business and other taxes.

Some may also need to work with the following agencies:

- National Marine Fisheries Service, if product comes from a federally managed fishery. a Federal Processor Permit, endorsed for either Shoreside Processor or Stationary Floating Processor, is required if you do any processing (see Appendix A).
- Alaska Division of Measurement Standards; scales used to weigh product must be certified.
- Local city governments for vendor licenses, regulations, and city sales taxes for transactions within a municipal jurisdiction.
- U.S. Food and Drug Administration (FDA) for:
 - › mandatory one-time registration as a food processing facility.
 - › random processor inspection for sanitation and HACCP compliance.
 - › nutritional labeling on any retail size packaging that may be used.
- U.S. Department of Commerce in some cases for services under voluntary inspection and certification programs.

WHAT IS “PROCESSING”?

DEC and DOR make an important distinction between operations that **process** seafood products and those that do not. By DEC definition, **you are a processor if you:** head or butcher product, recover roe, shuck, pickle, cook in water/ steam, hot or cold smoke, salt/brine, dry, do mixing/formulating, freeze, make surimi, preserve in retorted thermal packaging. DEC also considers it to be processing if you **package and transport** product from your boat to another location. DOR classifies **sale of live fish and shellfish** as processing.

Contact the agencies for information on special circumstances.

The definition of processing does not include: gutting, gilling, sliming, icing or decapitating shrimp if performed on a vessel while on the fishing grounds.

TYPES OF OPERATIONS

The first step in determining which permits, licenses, reports, bonds and taxes are required is to decide which kind of operation you are planning. An operation may fall into more than one category. For clarification contact the agencies directly. The scope of this Seafood Direct Marketing Manual covers only these categories: Catcher/ Floating Processor, Direct Marketer, Roe Recovery, Catcher/Seller, Exporter. Following are classes of operation based on state agency criteria:

- A. **Catcher/Processor.** Catches, processes and sells processed seafood products, and includes:
 1. **Direct Marketer**, 65 feet or less in length. May only process own fish.
 2. **Catcher Processor or Floating Processor** (>65 feet). Floating Processors can buy or custom process, but Catcher Processors cannot buy fish to process and sell, or custom process.
 3. **Roe Recovery Only.** Recovers roe for sale as a product for human consumption.

Note: Roe stripping and discarding carcasses is prohibited.

Note: Salmon fishermen such as trollers who gut their catch and sell the roe after it has been removed from the fish, even to the same processor who buys the fish, need to be licensed for Roe Recovery.

- B. **Catcher/Seller.** Sells his or her own catch unprocessed and unpackaged inside Alaska, at the dock directly to the consumer, or to a food establishment that has a DEC Seafood Processing Waiver. If a food establishment with a Seafood Processing Waiver is the buyer, it must pick up the product at the boat or the seller must have a DEC permit to transport the product to the establishment. Catcher/Sellers can also sell product for bait.
- C. **Exporter.** “Export” means transporting product out of Alaska to another state or country. Includes:
 1. **Catcher/Exporter.** Catches and transports unprocessed fish out of the state to a processing facility under the regulatory oversight of a governmental health agency.
 2. **Buyer/Exporter.** Buys unprocessed fish from harvesters for transport out of the state to processing facilities under the regulatory oversight of a governmental health agency.
- D. **Processor.** Processes seafood products for commerce and includes:
 1. **Inshore Floating Stationary Processors.**
 2. **Floating Processors greater than 65’** in length (>65’). a vessel of less than 65’ that buys and processes on board can also be licensed as a processor if it meets all the DEC requirements.
 3. **Shore-based Processors.**
 4. **Canneries.**
 5. **Live Sales.** DOR considers live sales to be “processing”.
- E. **EEZ Only.** Processes only in the federal Exclusive Economic Zone (between 3 and 200 miles from shore).
- F. **Waivered Buyers.** Markets, restaurants, grocers or lodges that have a DEC Seafood Processing waiver. May buy up to 500 lbs per week from catcher/sellers for sale or use in their establishment.

- G. **Independent Buyer.** Buys from fishermen to sell to licensed processors or exporters who have the product processed in a facility under the regulatory oversight of a governmental health agency.
- H. **Transporter.** An agent of fishermen who can transport only salmon, herring, Pacific cod, and legally taken bycatch species in those fisheries. (A Tender/Packer is an agent of a processor and requires a different permit.) Transporters do not buy or process fish.

STATE OF ALASKA REQUIREMENTS FOR CATEGORY A (CATCHER/PROCESSORS)

1. **Fisheries Business License.** An online application covers both the Department of Revenue and Department of Fish & Game license requirements for nearly all categories of fisheries businesses, including Category a (Catcher/Processor) fishermen who process, export, or have their own catch custom processed. To qualify an applicant must:
 - › hold a limited entry or interim use permit or IFQ quota shares and
 - › own or lease a commercial fishing vessel.

Operators using a vessel under 65' in length should apply as Direct Marketers and those with vessels over 65' must apply as Catcher/Floating Processors. When completing the online application, Direct Marketers are required to apply as sole proprietors. Catcher/Floating Processors may apply under other business formats.

The joint Direct Marketing and Alaska Seafood Processor and Exporter License and Permit Application no longer exists. Direct marketers need to apply to the Department of Environmental Conservation separately from the Department of Fish & Game and Department of Revenue application. Application for the DEC seafood processor permit and instructions are online at: <https://dec.alaska.gov/eh/fss/seafood/forms/seafood-processor-application-instructions/>

Important change in 2016: The Fisheries Business License Application and Intent to Operate and the Alaska Direct Marketing Fisheries Business License Application and Intent to Operate forms have been replaced by the DOR online Fisheries Business License Application. This application covers new licenses/permits and renewals for all categories of direct marketing operations. This application can be accessed at <https://online-tax.alaska.gov/>. Click the Enroll Now button and follow the prompts to apply for a password, which will be sent by mail and which is needed to complete the online application process. Detailed instructions for the Fisheries Business License Application can be found at <http://www.adfg.alaska.gov/index.cfm?adfg=fishlicense.marketers>. a waiver allowing a paper copy of the application can be obtained

from DOR by calling 907-465-2320.

The ADF&G Allowable Activities Matrix describes allowable activities by permit type, and can be found at http://www.adfg.alaska.gov/static/license/fishing/pdfs/allowable_activities.pdf. Note that this matrix also differentiates between ADF&G and Fisheries Business License permits, but all permits are accessible through the online DOR application. The Department of Revenue charges a \$25 license fee for all categories.

2. **Alaska Commercial Operator's Annual Report (COAR).** a Commercial Operator's Annual Report accurately and completely summarizing the business's activities for the past year must be submitted to ADF&G no later than April 1 of each year. Forms are available online at <http://www.adfg.alaska.gov/index.cfm?adfg=fishlicense.coar> and at local offices. Most who file an ADF&G Intent to Operate as part of the DOR/ADF&G Business License Application must complete this form whether engaged in the proposed activities or not. Catcher/Sellers are not required to file a COAR.
3. **Fish Tickets.** ADF&G also requires that fish tickets be completed for each landing of fish. Apply for a number code plate and blank fish tickets with the Intent to Operate or Direct Marketing Fisheries Business License application. The business then either purchases a stamping machine or arranges with a local ADF&G office to stamp completed tickets in their office after each trip. Completed tickets generally must be submitted within seven days to the local ADF&G office. Operators in some fisheries have additional reporting requirements and may be required to report more frequently.

As an alternative to paper fish tickets, the eLandings system may be available as a reporting resource. The eLandings system or Interagency Electronic Reporting System (IERS) also generates a printable fish ticket. For more information, see the ADF&G reporting resources page, at <http://www.adfg.alaska.gov/index.cfm?adfg=fishlicense.reporting>.
4. **Fisheries Business Tax Return.** The DOR is responsible for collecting taxes on fishery products. a Fisheries Business Return must be filed every year by March 31. When fish are sold to a processor, these taxes are normally paid by that company. Direct marketers may have to pay one or more of five different taxes:
 - A. **Fisheries Business Tax** must be paid by the first processor of a fishery product. If the product is not processed but is exported from the state, the exporter must pay the fisheries business tax.

A direct marketer is likely to be the first processor. If product is custom processed, the direct marketer is responsible for paying the tax. If the catch is sold to a processor, even with the intention of buying some

of it back later, the processor is liable for the tax.

Current rates are:

Floating processor (including catcher/processor)	5.0 percent
Shore-based processor	3.0 percent
Canned salmon	4.5 percent
Direct marketer	3.0 percent

Percentages are based on “the prevailing value paid for fisheries resources of like kind and quality by fisheries businesses in the same market area to fishermen who own their vessels.” Rates are lower for “developing species.” Contact DOR for a current list of these species.

- B. **Landing Tax** is paid on fisheries products caught and processed outside Alaska state waters (three mile limit) and first landed or transferred inside Alaska or within state waters. The assessment rate is 3 percent based on the unprocessed value as posted as the statewide average price, calculated by ADF&G and DOR.
- C. **Salmon Enhancement Tax** is paid by fishermen where regional salmon aquaculture associations exist. The tax is 1-to-3 percent depending on the region’s self-assessment. Licensed buyers must collect this tax and remit it to the state. Salmon Enhancement taxes are listed on fish tickets. This tax is reported and remitted monthly to the DOR. Catchers/Sellers and fishermen operating under a Direct Marketing Fisheries Business License selling to unlicensed buyers must pay this tax directly to DOR but are allowed to remit yearly. Contact DOR for more information.
- D. **Seafood Marketing Assessment** is paid by processors handling more than \$50,000 worth of product annually. Processors must pay 0.5 percent of the ex-vessel value of all seafood processed to fund the activities of the Alaska Seafood Marketing Institute.
- E. If products are sold within the limits of a city or state that has a **local sales tax**, the seller will be required to collect this tax on all sales of the product. Contact the city or local government for information concerning reporting and payment requirements.

Note: Business owners can pay their fisheries business taxes online through the DOR website, Revenue Online, at <https://online-tax.alaska.gov/>. DOR also has a “Frequently Asked Questions” page, available at <http://tax.alaska.gov/programs/programs/help/faq/faq.aspx?60620#section0>, that may be helpful in determining tax and bonding requirements.

- 5. **Tax and Other Surety Bonds.** All people, firms or corporations that process fish in Alaska or export unprocessed product from Alaska must secure their estimated Fisheries Business Tax liability in advance. Catcher/Processors and Catcher/Exporters are not required to prepay or post bond if their estimated tax liability is \$500 or less.

To prepay estimated tax or secure credit, submit a letter of credit in the amount of the estimated tax, a time certificate of deposit in the amount of the estimated tax, a fisheries tax bond equal to twice the estimated tax, or verification of lienable real property valued at a sum equal to at least three times the estimated tax liability.

Surety bonding is required for the purchase of raw fish from other fishermen or if there is an Unemployment Insurance Contribution obligation for any employees. Operations that process more than 30,000 pounds of raw product annually are required to post a \$10,000 bond. Those that process less than 30,000 pounds annually are required to post a \$2,000 bond, or they can secure their credit for this bond in any of the ways listed above.

6. **ADEC Seafood Processors Permit Application**

Note: Before starting the processors permit application, be sure to read the Alaska Seafood Processing Regulations and related publications, which can be found at <https://dec.alaska.gov/eh/fss/seafood/>. The permit application covers requirements of the Alaska Department of Environmental Conservation for processors. The permit application requires a fisheries business license number.

Annual DEC fees levied on processors are based on the type and amount of processing being permitted. Fees as of 2017 are:

Shore-based facility processing <5000 lbs/day	\$ 795
Shore-based facility processing >5,000 lbs/day	\$2094
Cannery processing <5,000 lbs/day	\$1120
Cannery processing >5,000 lbs/day	\$2094
Direct Marketing Land-based	\$200
Direct Marketing Vessel <65'	\$325
Direct Marketing Vessel >65'	
(Catcher/Floating Processor), <5,000 lbs/day	\$795
All Other Vessel	\$2094

If the proposed operation involves processing as defined above, be prepared to submit scale drawings of the vessel or facility with the processing permit application that indicate location of toilet and hand-washing stations, plumbing lines, locations and types of processing equipment, how processing waste will be discharged, the source of approved water for processing and other specified information.

DEC will review the application and, depending on what and how the processing plan encompasses, may require any or all of the following additional permits: Plan Review and Approval of Sewage or Sewage Treatment Works, Air Quality Control Permit to Operate, Wastewater Disposal Permit, Solid Waste Management Permit, Plan Review and Approval of Public Water Systems, National Pollutant Discharge Elimination System Permit from the U.S. Environmental Protection Agency (EPA), or Foodservice Permit.

Processing these applications can take up to eight weeks and it is not legal to operate without having received initial issuance of the appropriate permits.

7. **HACCP Plan.** Federal Hazard Analysis Critical Control Point (HACCP) regulations require each processor to conduct a hazard analysis to identify significant hazards to sanitation or wholesomeness in the processing operation. A written HACCP plan must specify the critical control points, critical limits, and where and how they will be monitored. DEC includes HACCP inspections as part of their regular seafood processing facility inspections. See Appendix B for more on HACCP.
8. **Certification of Measuring/Weighing Devices.** Certification of Measuring/Weighing Devices from the Division of Measurement Standards is required for scales used to weigh fish for sale. Only National Type Evaluation Program (NTEP) legal for trade scales are acceptable. State inspectors in most cases are able to go to the plant or vessel to test the scales, which must be checked annually and bear an inspection sticker. The fee is based on the capacity of the scales. Even scales that have been certified in another state must be re-certified, because readings change with latitude.
9. **Federal Laws Enforced by the National Marine Fisheries Service (NMFS).** If you are marketing halibut or blackcod (sablefish) caught under provisions of an individual fishery quota (IFQ) or community development quota (CDQ), you must comply with applicable federal laws. See Appendix a for more information about direct sales of fish caught under the federal IFQ program.

STATE OF ALASKA REQUIREMENTS FOR CATEGORY B (CATCHER/SELLERS)

1. **Category B (Catcher/Seller) or Fisheries Business License application.** Catcher/Sellers may sell only their own catch, unprocessed, directly from their boat to the public in Alaska. The catcher/seller permit application is available online at <http://www.adfg.alaska.gov/static/>

[license/fishing/pdfs/1100-539.pdf](http://www.adfg.alaska.gov/index.cfm?adfg=fishlicense.sellers) and at local ADF&G offices. This application can also be completed through the DOR site, Revenue Online, under the Fisheries Business License application. Either application requires a \$25 fee. Full information on Catcher/Sellers can be found at <http://www.adfg.alaska.gov/index.cfm?adfg=fishlicense.sellers>

2. **Fish Tickets.** See Category A, subsection 3 above for details.
3. **Certification of Measuring/Weighing Devices.** See Category A, subsection 8 above for details.
4. **Fisheries Business Tax Return.** Catcher/Sellers are liable for payment of salmon enhancement taxes. See Category A, subsection 4 for details.
5. **Federal Laws Enforced by the National Marine Fisheries Service (NMFS).** See Appendix a for details.
6. **Mobile Vending License.** This license is required by DEC if product is to be transferred to a cart, car, or truck for sale.

STATE OF ALASKA REQUIREMENTS FOR CATEGORY C (CATCHER/EXPORTERS)

1. **Fisheries Business License Application.** See Category a above for details.
2. **Seafood Processors Permit.** This permit can be held by a custom processor who handles your seafood product or an "approved source"/Permitted Processor to whom you sell your product. If the product is handled by a custom processor, you will need to become an approved source/Permitted Processor yourself by filling out the DEC Seafood Processors Permit Application. See Category a above for details.
3. **Alaska Commercial Operators Report.** See Category a above for details.
4. **Fish Tickets.** See Category a above for details.
5. **Certification of Measuring/Weighing Devices.** See Category a above for details.
6. **Fisheries Business Tax Return.** See Category a above for details.
7. **Tax and Other Surety Bonds.** See Category a above for details.
8. **Federal Laws Enforced by the National Marine Fisheries Service.** See Appendix a for details.
9. **Exporting Salmon in the Round.** A special law applies to the exportation of salmon in the round (whole fish, not gutted). Contact DOR for details. The exporting of any seafood product, if not from an approved source/Permitted Processor, must be to a processing facility under the regulatory oversight of a governmental regulatory health agency.

REQUIREMENTS FOR ALL OTHER CATEGORIES

Categories D-G are not within the scope of this manual. Operators in these categories should begin by reviewing available online information from ADF&G, DEC and DOR in addition to directly communicating with each agency to determine which permits, licenses, taxes or bonds are required. Fees, taxes and permits other than those listed may be required.

Category H (Transporters) need a Fish Transporter Permit issued by ADF&G. If transporting on the water, the vessel must be registered with the Commercial Fisheries Entry Commission. See the ADF&G Fish Transporter page for full information on permits, operating requirements, fish ticket reporting requirements, and other regulations, available at <http://www.adfg.alaska.gov/index.cfm?adfg=fishlicense.transporters>. Transporters are exempt from posting bonds, paying fish processing taxes, and from filing a Commercial Operators Annual Report.

U.S. FOOD AND DRUG ADMINISTRATION (FDA) REQUIREMENTS

The Public Health Security and Bioterrorism Preparedness and Response Act of 2002 requires all food processors, including fisheries enterprises in Alaska that meet the definition of seafood processing, to be registered with the FDA. Exempted are fishing vessels that head, gut, or freeze fish solely to maintain their quality while aboard the vessel for delivery to a processor. Registration can be done online at www.accessfda.gov. Paper applications are available at <https://www.fda.gov/food/guidanceregulation/foodfacilityregistration/ucm073728.htm>.

Processors whose product goes into interstate trade are subject to mandatory, unannounced FDA sanitation and HACCP inspections. The FDA contracts with the state's DEC to do most of its processing vessel inspections.

The FDA requires seafood products sold in retail-size packaging to have nutritional content labels, though there is an exemption for small businesses. The Alaska DEC also requires products to be labeled as described in the Alaska Sea Grant publication Labeling Requirements for Seafood, <http://fishbiz.seagrant.uaf.edu/component/jdownloads/send/13-publications/191-labeling-requirements-for-alaska-seafood-processors.html>. Nutritional content information for individual fish and shellfish species is available at www.nal.usda.gov/fnic.

AGENCY DIRECTORY

Alaska Department of Environmental Conservation

Division of Environmental Health, Seafood Section
555 Cordova St
Anchorage, Alaska 99501-2617
Phone: 907-269-7501; fax: 907-269-7510

Useful DEC info

Seafood processors permit information:
phone: 907-269-7628, seafoodprocessing@alaska.gov

Seafood Permitting Coordinator: Joy McLaurin

Seafood safety and sanitation home page:

<https://dec.alaska.gov/eh/fss/seafood/>

Seafood processing regulations: <https://www.akleg.gov/basis/aac.asp#18.34> - online version

<https://dec.alaska.gov/media/1036/18-aac-34.pdf> - pdf version

Alaska Department of Fish and Game

Division of Commercial Fisheries PO Box 25526
Juneau, Alaska 99802-5526
Phone: 907-465-4210
fax: 907-465-2604

<http://cfweb@fishgame.state.ak.us>

Useful ADF&G info

For information on ADF&G direct marketing resources, contact the seafood industry coordinator:

Phone: 907-465-6131 or

<http://dfg.seafood-coord@alaska.gov>

Commercial Fishing Licenses and Permits home page:

<http://www.adfg.alaska.gov/index.cfm?adfg=fishlicense.main>

Reporting Resources page: <http://www.adfg.alaska.gov/index.cfm?adfg=fishlicense.reporting>

Fisheries Business License Application instructions: <http://www.adfg.alaska.gov/index.cfm?adfg=fishlicense.marketers>

Division of Measurement Standards

Section of Weight and Measures

12050 Industry Way, Bldg O

Anchorage, Alaska 99515

Phone: 907-365-1222

fax: 907-345-2313

https://dot.alaska.gov/mscve/pages/measurement_standards.shtml

Alaska Department of Revenue

Tax Division
PO Box 110420
Juneau, Alaska 99811-0420

Fishery Business License Information:
Phone: 907-465-2300
<https://dor.alaska.gov/>

Instructions for the ADF&G/DOR online Fisheries
Business License application: [http://www.adfg.alaska.gov/
index.cfm?adfg=fishlicense.marketers](http://www.adfg.alaska.gov/index.cfm?adfg=fishlicense.marketers).

National Marine Fisheries Service

Restricted Access Management Division PO Box 21668
Juneau, Alaska 99802-1668
Phone: 907-586-7221; fax: 907-586-7131
RAM.alaska@noaa.gov
<http://www.nmfs.noaa.gov>



Photo Courtesy of Alaska Seafood



Photo Courtesy of Alaska Seafood

Appendix F

WASHINGTON STATE AND LOCAL REGULATIONS, PERMITS AND MORE FOR SEAFOOD ALTERNATIVE MARKETS

*Jenna Keeton & Brandii O'Reagan, Washington Sea Grant
Adapted from design by Mina Orlic*

Note: The following information is intended for educational purposes only and is subject to change. Fishermen should contact the agencies directly to determine what is required for their particular situation Washington State and Local Regulations, Permits and More for Seafood Alternative Markets.

Fishermen considering selling their catch or product directly from their boat, a roadside stand/market, or other alternative market will need to follow regulations and guidelines and obtain specific licenses, registrations, permits, and certificates from several state and local agencies in addition to the licenses and permits required to fish commercially. Here we provide selected general information, by agency, that highlights some of these requirements and associated fees (as of October 2024).

Fishermen should contact the agencies below to determine current requirements and fees and to ensure they are in compliance. When doing so, fishermen will need to be able to describe the seafood products they will be selling—species, product form (e.g., whole, fillet, smoked—and the type of alternative market(s) they will use.

WASHINGTON DEPARTMENT OF FISH & WILDLIFE	WASHINGTON STATE DEPARTMENT OF AGRICULTURE	WASHINGTON STATE DEPARTMENT OF HEALTH	COUNTY-LEVEL HEALTH DEPARTMENTS OF WASHINGTON
Fish Dealer License	Weighing Scale Certification	WDOH Food Safety Program	Each county has a local health department that sets requirements for selling to retail.
Wholesale Fish Buyer Endorsement	Food Processor License	WDOH Shellfish Program	
Limited Fish Seller Endorsement	Food Storage Warehouse	Shellstock Shipper License	

Figure 1. Regulations, permits, and more for buying and selling fish and shellfish in Washington State, by agency.

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE (WDFW)

The following information is condensed from the Revised Code of Washington (RCW) and the Washington Administrative Code (WAC). This applies to persons and businesses that handle, deal in, broker, or accept seafood or seafood products. The information contained herein is not a complete summary of all laws and regulations pertaining to the seafood industry. For actual language, refer to the appropriate RCW and WAC regulations which can be found on the internet at the Washington State Office of the Code Revisor: <https://apps.leg.wa.gov/rcw/default.aspx>.

You must abide by all laws and regulations in effect at the time of participation in any commercial fish business activity. Any discrepancies between this document and the code(s) from which it was prepared will be enforced and adjudicated according to the official code(s) in effect on the date the activity takes place.

WDFW LICENSE DIVISION

Website: <https://wdfw.wa.gov/licenses>

Contact: Commercial Licensing Customer Service

Phone: 360-902-2464, Option 4

Email: commercialsales@dfw.wa.gov

FISH DEALER LICENSE

This is the minimum license required to broker and/or process fish and shellfish and replaces the Wholesale Fish Dealer License.

Brokering is defined as facilitating the sale or purchase of raw or frozen fish/shellfish for a fee or commission, without assuming the title to the fish/shellfish.

Processing is defined as taking possession of raw or frozen fish/shellfish to prepare, repackage, process or preserve, which includes, but is not limited to canning or processing for payment whether the fish or shellfish is commercially harvested or taken for personal use, and the commercial manufacture or preparation of fertilizer, oil, meat, caviar, fish bait, or any other by-products from fish or shellfish.

A Fish Dealer License is also required for individuals engaged in the wholesale buying, selling, or brokering of raw or frozen fish/shellfish.

The annual fee for a Fish Dealer License is \$400 for Washington residents, \$785 for nonresidents. The application fee is \$105 (2024, subject to change).

WHOLESALE FISH BUYER ENDORSEMENT

This endorsement must be added to the Fish Dealer License (see above) to take first possession or ownership of fish/shellfish from commercial harvesters landing their fish/shellfish in Washington state, to take first possession or ownership of fresh or frozen fish/shellfish from interstate or foreign commerce, or to engage in wholesale buying or selling of fish/shellfish harvested by tribal harvesters.

Wholesale fish buyers are also responsible for documenting the commercial harvest and sales according to the rules of WDFW.

The annual fee for a wholesale fish buyer endorsement is \$245 for residents and \$630 for nonresidents. The application fee is \$105.

LIMITED FISH SELLER ENDORSEMENT

This endorsement allows commercial harvesters and designated alternate operators to sell their catch directly to market. The holder of this endorsement is also exempt from the permitting requirements of chapter 246-215 Washington Administrative Code (Foodservice) provided the seller only sells fresh fish—whole or cleaned and dressed.

The annual fee is \$70 for Washington residents and \$455 for nonresidents. The application fee is \$105 (2024, subject to change).

BOND REQUIREMENTS

The Wholesale Fish Buyer Endorsement requires a cash deposit, performance bond, or savings account assignment in the amount of \$2,000 (for up to 2 buyers).

For each additional buyer engaged by the wholesale business, the cash deposit, bond, or savings account assignment must be increased by an additional \$1,000.

Limited fish sellers are required to submit a cash deposit, performance bond, or savings account assignment in the amount of \$1,000 (2024, subject to change).

This information is provided by Washington Department of Fish and Wildlife.

WASHINGTON STATE DEPARTMENT OF AGRICULTURE (WSDA)

The WSDA oversees the safe and legal handling and distribution of food products in Washington State. The following provides information about WSDA licenses and permits that may pertain to fishermen selling their catch through seafood alternative markets. Fishermen should check the information sources for each program and contact WSDA directly for up-to-date information and to determine the requirements that apply to their specific situation.

DEPARTMENT OF REVENUE WEIGHING & MEASURING DEVICES

Website: <https://dor.wa.gov/manage-business/state-endorsements/weighing-and-measuring-devices>

Contact: WSDA Customer Service

Phone: 360-902-1822

Email: wtsmeasures@agr.wa.gov

WEIGHING SCALE CERTIFICATION

Scales used to sell seafood must be approved and registered. Most seafood must be sold by weight. Whole shellfish may be sold by count. Size designations may be provided.

The annual fee is dependent on scale capacity. The cost is \$16 for 0–400 pounds (2024, subject to change). Please refer to the Department of Revenue Weighing and Measuring Devices website for more information about fees: <https://dor.wa.gov/manage-business/state-endorsements/weighing-and-measuring-devices>.

The scale must have a National Type Evaluation Program (NTEP) Certificate of Conformance. Scales must be registered annually with the WA Department of Revenue, Business Licensing Service. Any device used for commercial purposes has to be placed in service by a registered service agent.

A copy of the business license with weights and measures endorsement must be on site with the scale. Seafood product that is weighed and packaged without the customer present must be labeled with the product name, net weight, price per unit, and total price as specified in NIST Handbook 130, Uniform Packaging and Labeling Regulation. Additional information also may be needed on the label per the Fair Packaging and Labeling Act.

FOOD PROCESSOR LICENSE

Food Processing is defined as the handling or processing of any food in any manner of preparation for sale for human consumption at a fixed location. For example, smoked, cooked and/or frozen salmon and many other seafood products that are processed for sale or distribution and food that is custom processed for another party. It also includes repacking foods that are taken from one container in an unwrapped state and transferred or repackaged in another container.

A food processor license is required for the processing of food products. The FDA defines processing as handling, storing, preparing, heading, eviscerating, shucking, freezing, changing into different market forms, manufacturing, preserving, packing, labeling, dockside unloading, or holding fish and fishery products. Excludes practices such as heading, eviscerating, or freezing solely to prepare a fish for holding on board a commercial fishing vessel.

The annual license fee is \$200.00 (2024, subject to change), unless you are able to claim an exemption. Contact WSDA Customer Service for more information about exemptions.

The Food Processor's License is non-transferable. If you sell your business, the new owners must apply for a new license. If you move to a new location, you must apply for a new license for the new facility location. Please notify your inspector or the Olympia office if you sell your business or move to a new location.

A daily sanitation monitoring plan and a seafood HACCP plan is required for each type of fishery product for which a food safety hazard has been identified (see information sources above for specific requirements).

This license is not required for licensed retail food service establishments with 100% of sales occurring on site.

For more information including appropriate contact information and Food Processor application, please visit: <https://agr.wa.gov/departments/food-safety/food-safety/food-processors>.

FOOD STORAGE WAREHOUSE LICENSE

A **food storage warehouse** is defined as any premises, establishment, building, room area, facility, or place, in whole or in part, where food is stored, kept, or held for wholesale distribution to other wholesalers or to retail outlets, restaurants, and any such other facility selling or distributing to the ultimate consumer. Food storage warehouses include, but are not limited to, facilities where food is kept or held refrigerated or frozen and include facilities where food is stored to the account of another firm and/or is owned by the food storage warehouse.

A food storage warehouse license is required to store seafood away from the boat, prior to distribution to others (e.g., wholesalers, retail markets, restaurants, direct to consumer).

The annual fee varies between \$0-\$200 (2024, subject to change).

For more information, including appropriate contact information and Food Storage Warehouse application, please visit: <https://agr.wa.gov/departments/food-safety/food-safety/food-storage-warehouses>.

This information is provided by the Washington State Department of Agriculture.

WSDA FOOD SAFETY PROGRAM

Website: <https://agr.wa.gov/departments/food-safety/food-safety/food-processors>,
<https://agr.wa.gov/departments/food-safety/food-safety/food-storage-warehouses>

Contact: WSDA Customer Service

Phone: 360-902-1876

Email: foodsafety@agr.wa.gov

DEPARTMENTS OF HEALTH

Both state and local public health agencies regulate and assist with seafood safety, ensuring safe and sanitary seafood handling and distribution. Fishermen should check the information sources provided below and contact both the WDOH and the local (county and/or city) environmental health department directly for up-to-date information and to determine the requirements that apply to their specific situation.

WASHINGTON STATE DEPARTMENT OF HEALTH (WDOH)

Environmental Health and Safety Division

This division of WDOH includes several programs with staff who assist local governments and other agencies with environmental health and safety. Here we provide select information about two programs that may pertain to fishermen selling their catch through seafood alternative markets.

WDOH Food Safety Program

The WDOH Food Safety Program team partners with local health departments (along with other agencies) to promote safe practices in food service and retail settings. The Washington State Retail Food Code (link below)—adapted from the 2009 FDA Food Code with some modifications (link below)—provides the safety standards for food served or sold to the public, and includes retail shellfish requirements and food worker card regulations.

WDOH ENVIRONMENTAL PUBLIC HEALTH

Website: <http://www.doh.wa.gov/AboutUs/ProgramsandServices/EnvironmentalPublicHealth/EnvironmentalHealthandSafety/FoodSafety>

Retail Food Code: <http://www.doh.wa.gov/Portals/1/Documents/Pubs/332-033.pdf>

Food Safety Rules & Regulations:

<https://doh.wa.gov/community-and-environment/food/food-worker-and-industry/food-safety-rules>

Contact: WDOH Customer Service

Phone: 360-902-1876

Email: food@doh.wa.gov

WDOH Shellfish Program

The WDOH Shellfish Program regulates shellfish food safety through testing of both filter-feeding shellfish (e.g., geoduck and other clams, scallops) and the water where they grow and are harvested by commercial (and recreational) fishermen. The following provides information about one type of license from the Shellfish Program that may pertain to fishermen selling their catch through seafood alternative markets.

Shellfish Shipper License

This license allows someone to commercially harvest and sell filter-feeding shellfish (e.g., geoduck and other clams, scallops) shellstock.

The annual fee for this license is \$263 (2024, subject to change), plus annual PSP testing fee (dependent on number of harvesting sites). e.g., \$353 for 1-2 harvest sites, \$535 for 3 or more sites

This license does not allow shucking of shellfish or repacking shucked shellfish. Harvested product must be handled and shipped in accordance with shellstock safety requirements.

More information about licenses and fees and shellstock safety requirements can be found here:

<https://doh.wa.gov/community-and-environment/shellfish/commercial-shellfish/apply-license/shellstock-shipper-license>

WDOH SHELLFISH PROGRAM

Website: <https://doh.wa.gov/community-and-environment/shellfish>

Contact: WDOH Customer Service

Phone: 360-236-3330

Email: shellfish@doh.wa.gov

COUNTY-LEVEL HEALTH DEPARTMENTS IN WASHINGTON

Each county has a local health department that sets the requirements for selling to retail. It is best practice to reach out to the county-level health department for their specific requirements. Depending on the type of market and where it is located, additional permits and fees may be required by local authorities. Fishermen should contact local health department authorities directly for up-to-date information and to determine the requirements that apply to their specific situation. For Washington County Health Department contact information, please visit: <http://www.doh.wa.gov/CommunityandEnvironment/Food/LocalFoodSafetyContacts>.

For example, in King County, direct marketers who sell straight to consumers (1 on 1) off the boat dock DO NOT need a permit from the King County Health Department but DO need a Limited Fish Seller Endorsement from Washington State Department of Fish and Wildlife. However, direct marketers who wish to sell at a Farmers Market do need an additional permit from the King County Health Department because Farmers Markets are considered a retail space.

See the Port of Bellingham's website for guidance documents related to Bellingham Dockside Market at: <http://www.bellinghamsdockside.com>

- **Permit and Document Checklist:** This document lays out the initial steps and requirements for commercial fishermen to sell their catch directly to customers. Commercial fishers are required to have the following documents in place prior to any sales activity.
- **Vendor Handbook:** This document includes the market's core values, market schedule, procedures and fees, memberships and products guidelines, regulatory policies and more.

FURTHER CONSIDERATIONS AT THE LOCAL LEVEL

County: County planning departments may require meeting zoning regulations and providing proof of permission from appropriate agencies (e.g., state highway division, county road office) when selling from a vehicle or stand on a public right-of-way or from property owners if selling from private property. Customers who report sickness associated with a seafood product should report it to their local health department. Each county has an illness hotline and local health departments will follow up with WDOH if shellfish is implicated.

City: City government may require a business license, vendor's license, or both if selling from a vehicle or stand within city limits. Also, selling from private property requires proof of permission from the property owner, having an appropriate business license, and meeting local zoning requirements.

Harbor/Marina: Local harbors/marinas may have their own requirements for selling one's catch off the boat or at a dockside (or fishermen's) market. In some cases, only certain products or types of markets are allowed. .

WASHINGTON COUNTY HEALTH DEPARTMENT FOOD SAFETY CONTACTS

Website: <http://www.doh.wa.gov/CommunityandEnvironment/Food/LocalFoodSafetyContacts>

Appendix G

OREGON STATE AND LOCAL REGULATIONS, PERMITS AND LICENSES FOR SEAFOOD ALTERNATIVE MARKETS

*Amanda Gladics and Jamie Doyle, Oregon Sea Grant
Adapted from design by Mina Orlic*

Note: The information on this page is intended for educational purposes only and is subject to change. Seafood harvesters should contact the agencies directly to determine what is required for their particular situation.

Fishermen who sell their catch directly from their boat, a roadside stand/market, or alternative market need to follow regulations and guidelines and obtain specific licenses, registrations, permits, and certificates from several state and local agencies in addition to the licenses and permits required to fish commercially. Here we provide selected general information, by agency, that highlights some of these requirements and associated fees (as of 2024).

Fishermen should contact the agencies below to determine current requirements and fees to ensure they are in compliance. When doing so, fishermen will need to describe the seafood products they will be selling—species, product form (e.g., whole, fillet, smoked)—and the type of alternative market(s) they will use.

OREGON DEPARTMENT OF FISH & WILDLIFE	OREGON DEPARTMENT OF AGRICULTURE	OREGON HEALTH AUTHORITY	LOCAL AUTHORITIES
Commercial Limited Fish Sellers Permit	Weighing Scale Certification	Food Safety Certificate	Depending on the type of market and where it is located, additional permits and fees may be required by local authorities.
Wholesale Fish Dealer License (Reporting & Non-reporting)	Retail Food Establishment License	Mobile Food Unit License	
	Food Processor's License	Restaurant License	
Commercial Fisher Transportation Report	Food Storage Warehouse License	Temporary Restaurant License	
		Commissary Kitchen Agreement	

Figure 1. Regulations, permits, and more for buying and selling fish and shellfish in Oregon, by agency.

OREGON DEPARTMENT OF FISH AND WILDLIFE (ODFW)

There are four types of ODFW commercial fishing licenses that may be appropriate for fishermen selling their catch through seafood alternative markets. Fishermen should contact ODFW directly for current information and to determine the requirements that apply to their specific situation.

ODFW COMMERCIAL FISHERIES DIVISION

Commercial Fisheries Division: <https://www.dfw.state.or.us/fish/commercial>

Commercial Fisheries Licensing Staff: <https://www.dfw.state.or.us/fish/commercial/questions.asp>

Contact: Commercial Licensing Customer Service

Phone: 503-947-6101

Email: odfw.info@state.or.us

COMMERCIAL LIMITED FISH SELLERS PERMIT

This permit is required to sell all or a portion of the catch to an ultimate consumer from the boat.

It only allows for dockside sales to the end consumer, from the vessel from which the catch was made. Customers must receive their product at the vessel—no sales may occur away from the boat.

Restaurants are considered an end consumer, but transport from vessel to another location is not allowed. Limited processing (loining or filleting) is allowed after the fish is sold and reported, and only if it is done on the seller's own vessel. Otherwise, it will need to meet additional Oregon Department of Agriculture handling and selling requirements.

The permit cannot be used by others (e.g., spouse, business partner, employee) at any time, only by the licensed fisherman.

The annual fee for a Commercial Limited Fish Sellers Permit is \$102.00 for Oregon Residents, \$152 for non-Oregon residents, plus a \$200.00 bond (2024, subject to change).

WHOLESALE FISH DEALER LICENSE (REPORTING)

The Wholesale Fish Dealer License (Reporting) is required to process fish or sell to retailers (e.g., fish markets, grocery stores, wholesalers).

It allow the business to buy fish and shellfish from harvesters and other wholesale dealers and sell to retail businesses or other wholesalers.

This license is only valid for a single business location (e.g., a home) where all transactions must occur. Boats in slips cannot be licensed as wholesale dealers as they do not meet the requirement of a physical address unless the boat is immobile and permanently docked.

A buyer's license is required for anyone buying from a fisherman away from the fisherman's business location.

The annual fee for a Wholesale Fish Dealer License (Reporting) is \$500.00 plus a \$1000 minimum bond and \$277 for a Buyers License (to buy product when away from licensed location) (2024, subject to change).

WHOLESALE FISH DEALER LICENSE (NON-REPORTING, FISH BROKERS)

The Wholesale Fish Dealer License (Non-Reporting, Fish Brokers) is required to process fish or sell to other wholesalers or retail businesses.

It allows the business to buy and sell fish and shellfish with other wholesale dealers, and requires less reporting to the state because you do not issue fish tickets.

The annual fee is \$502.00 for the Wholesale Dealers License, plus a \$1000 minimum bond and \$277 for a Buyers License (to buy product when away from licensed location) (2024, subject to change).

COMMERCIAL FISHER TRANSPORTATION REPORT

The Commercial Fisher Transportation Report is required of commercial fishermen selling to a wholesale dealer that does not have an unloading facility on the water. They must have a written transportation report, invoice, or memorandum in hand prior to removing and transporting product to another location.

The report must contain the following information:

- Date
- Name and address of the Oregon-licensed Wholesale Fish Dealer or Oregon-licensed Fish Bait
- Dealer where the food fish or shellfish are being delivered
- The number of each species of food fish or shellfish, their weight or estimated weight in pounds

This does not apply to retail fish dealers or wholesale fish dealers. There is no annual fee associated with this report.

OREGON DEPARTMENT OF AGRICULTURE (ODA)

The ODA oversees the safe and legal handling and distribution of food products in Oregon. As of 2023, three programs within the ODA may pertain to fishermen selling their catch through seafood alternative markets. Fishermen should check the information sources within each program and contact ODA directly for current information and to determine which requirements apply to their specific situation.

WEIGHING SCALE CERTIFICATION

Scales used to sell seafood must be licensed, tested and approved by the ODA Weights and Measures prior to use and licenses must be renewed annually by July 1.

The annual fee is dependent on scale capacity (e.g., \$45 for 0–400 pounds, \$91 for 401–1,160 pounds, \$184 for 1,161–7,500 pounds).

The scale must have a National Type Evaluation Program (NTEP) Certificate of Conformance. It must also have a Placed In Service Report (PISR) submitted within 24 hours of the time the device is placed in service.

The scale must comply with the requirements on the PISR and meet the specifications found in NIST Handbook 44.

Product that is weighed and packaged without the customer present must be labeled with the product name, net weight, price per unit and total price as specified in NIST Handbook 130, Uniform Packaging and Labeling Regulation. Additional information also may be needed on the label per the Fair Packaging and Labeling Act.

ODA WEIGHTS AND MEASURES

Website: <https://www.oregon.gov/oda/programs/MarketAccess/WeightsMeasures/Pages/AboutWeightsMeasures.aspx>

License a Scale: <https://www.oregon.gov/oda/programs/MarketAccess/WeightsMeasures/Pages/LicenseScaleMeter.aspx>

Weighing and Measuring Device Application: Find the License Application on the “License a Scale” webpage.

Operating a Scale: <https://www.oregon.gov/oda/programs/MarketAccess/WeightsMeasures/Pages/OperatingScale.aspx>

Contact: ODA Main Office

Phone: 503-986-4670

RETAIL FOOD ESTABLISHMENT LICENSE

The Retail Food Establishment License is required to sell product from your vehicle, stand or retail store.

The establishment must submit a food safety plan review and comply with ODA retail food code. The establishment may also be required to submit a HACCP plan along with a variance application.

All foods sold at the establishment must be produced by a business licensed by either ODA or a County Health Department (depends on location). Foods produced in other states must be licensed by the responsible agency in that state.

For a Retail Food Establishment Pre-Opening Checklist visit:

<https://www.oregon.gov/oda/programs/foodsafety/fslicensing/pages/retail.aspx>.

The annual fee for a Retail Food Establishment License is dependent on annual gross sales (AGS) (e.g., \$159 for \$0–\$50,000 AGS, \$317 for \$50,001–\$500,000 AGS) (2023, subject to change).

ODA FOOD SAFETY DIVISION

Website: <https://www.oregon.gov/oda/programs/FoodSafety/Pages/AboutFoodSafety.aspx>

Contact: ODA Main Office

Phone: 503-986-4670

Email: foodsafety@oda.oregon.gov

Food Safety Inspector County Contact List:

<https://www.oregon.gov/ODA/AboutUs/Pages/ODADirectory.aspx#or-foodsafety>

Find My Food Inspector Search: <https://mylicense.oda.state.or.us/plsapex/f?p=250:15>

Fish and Fishery Products Step by Step Guide:

<https://www.oregon.gov/oda/shared/Documents/Publications/FoodSafety/FishandFisheryProductsStepbyStep.pdf>

“Seafood HACCP - Is it required?” Guide: <https://www.oregon.gov/oda/shared/Documents/Publications/FoodSafety/FishandFisheryProductsStepbyStep.pdf>

Seafood Laws and Regulations Guide:

<https://www.oregon.gov/oda/shared/Documents/Publications/FoodSafety/SeafoodLawsRegs.pdf>

FOOD PROCESSOR'S LICENSE

Food Processing is defined by the ODA as “cooking, baking, heating, drying, mixing, grinding, churning, separating, extracting, cutting, freezing or otherwise manufacturing a food or changing the physical characteristics of a food, and the packaging, canning or otherwise enclosing of such food in a container, but does not mean the sorting, cleaning or water-rinsing of a food.”

A food processor license is required for the processing of food products. The FDA defines processing as handling, storing, preparing, heading, eviscerating, shucking, freezing, changing into different market forms, manufacturing, preserving, packing, labeling, dockside unloading, or holding fish and fishery products. It excludes practices such as heading, eviscerating, or freezing solely to prepare a fish for holding on board a commercial fishing vessel.

The annual license fee is dependent on AGS (e.g., \$381 for \$0–\$50,000 AGS; \$539 for \$50,001–\$500,000 AGS) (2023, subject to change).

An HACCP plan is required for all seafood processors and importers.

For more information including appropriate contact information and Food Processor application, please visit: <http://www.oregon.gov/ODA/programs/FoodSafety/FSLicensing/Pages/ProcessingWarehouse.aspx>.

FOOD STORAGE WAREHOUSE LICENSE

A Food Storage Warehouse License is required to store seafood away from the boat, prior to distribution to others (e.g., wholesalers, retail markets, restaurants, consumers).

This license is not required for licensed retail food establishments that store food to be served to employees, customers or guests or for licensed food processors who warehouse the finished product at the same location where the food is processed.

The annual fee is dependent on AGS (e.g., \$127 for \$0–\$50,000 AGS; \$159 for \$50,001–\$500,000 AGS) (2023, subject to change).

For more information including appropriate contact information and Warehouse Licensing application, please visit: <https://www.oregon.gov/ODA/programs/FoodSafety/FS Licensing/Pages/ProcessingWarehouse.aspx/1000>.

SEAFOOD COMMODITY COMMISSIONS

Additional forms and associated fees must be submitted and paid to the pertinent Seafood Commodity Commission when selling (or buying) certain fishery products. Annual fees will vary by product.

Fishermen should contact the appropriate commission(s) (listed below) to determine current requirements and fees to ensure they are in compliance.

OREGON DUNGENESS CRAB COMMISSION

Website: <https://oregondungeness.org/>

Phone: 541-267-5810

Email: info@oregondungeness.org

OREGON ALBACORE COMMISSION

Website: <https://oregonalbacore.org/>

Phone: 971-209-2030

Email: ericka@oregonalbacore.org

OREGON SALMON COMMISSION

Website: <https://oregonsalmon.org/>

Phone: 541-994-2647

Email: ericka@oregonsalmon.org

OREGON TRAWL COMMISSION

Website: <https://www.oregontrawl.org/>

Phone: 971-994-2647

Email: yelena@ortrawl.org

OREGON HEALTH AUTHORITY (OHA)

County and city environmental health departments inspect and license food operations to ensure safe food handling practices. Required permits and fees vary among counties and seafood alternative markets. The permits and certifications listed below, as well as others, may be required by a given environmental health department.

Fishermen should contact their local environmental health department directly for up-to-date information and to determine the requirements that apply to their specific situation. For more information, contact the Department of Health of the county in which you will be operating your business (see county contact list below).

OHA PUBLIC HEALTH AUTHORITY DIRECTORY

Local Public Health Authority Direction: <https://www.oregon.gov/oha/ph/providerpartnerresources/localhealthdepartmentresources/pages/lhd.aspx>

Contact: OHA State Office

Phone: 971-673-1222

Email: erica.vaness@dhsaha.state.or.us

FOOD SAFETY CERTIFICATE

This certificate is required of any food worker engaged in food handling or food service and must be obtain within 30 days of beginning work.

MOBILE FOOD UNIT LICENSE

The Mobile Food Unit License is required if operating a new or previously licensed mobile unit as a food retail establishment (e.g., food carts, food trucks).

RESTAURANT LICENSE

This license is required if operating a new or previously licensed restaurant as a food retail establishment.

TEMPORARY RESTAURANT LICENSE

The Temporary Restaurant License allows someone to sell seafood at temporary food retail establishments (e.g., farmers market, food booths).

COMMISSARY KITCHEN AGREEMENT

A Commissary Kitchen Agreement may be required to allow a food retailer, caterer or mobile food unit access and use of a licensed food retail establishment as a kitchen. The agreement often requires cosigning by the food establishment and the kitchen operator and approval by the local environmental health advisor.

LOCAL AUTHORITIES

Depending on the type of market and where it is located, additional permits and fees may be required by local authorities. Below are a few examples of such local requirements.

Fishermen should contact local authorities directly for up-to-date information and to determine the requirements that apply to their specific situation.

► COUNTY

County government (planning departments) may require meeting zoning regulations and providing proof of permission from appropriate agencies (e.g., state highway division, county road office) when selling from a vehicle or stand on a public right-of-way or from property owners if selling from private property.

► CITY

City government may require a business license, vendor's license, or both if selling from a vehicle or stand within city limits. Selling from private property requires proof of permission from the property owner, having an appropriate business license, and meeting local zoning requirements.

► HARBOR/MARINA

Local harbors/marinas may have their own requirements for selling one's catch off the boat or at a dockside (or fishermen's) market. In some cases, only certain products or types of markets are allowed, or there may be time and seasonal restrictions on direct selling.



Photo Courtesy of Oregon Sea Grant

Appendix H

CALIFORNIA STATE AND LOCAL REGULATIONS, PERMITS AND MORE FOR SEAFOOD ALTERNATIVE MARKETS

*Carolynn Culver, Carrie Pomerey and Ashley Stroud, California Sea Grant
Adapted from design by Mina Orlic*

Note: The following information is intended for educational purposes only and is subject to change. Seafood harvesters should contact the agencies directly to determine what is required for their particular situation.

Seafood harvesters considering selling their catch or product directly from their boat, a roadside stand/market, or other alternative market will need to follow regulations and guidelines and obtain specific licenses, registrations, permits, and certificates from several state and local agencies *in addition* to the licenses and permits required to fish commercially. Here we provide selected general information, by agency, that highlights some of these requirements and associated fees (as of 2024).

Seafood harvesters should contact the agencies below to determine current requirements and fees and to ensure they are in compliance. When doing so, seafood harvesters will need to be able to describe the seafood products they will be selling—species, product form (e.g., whole, fillet, smoked)—and the type of alternative market(s) they will use.

CALIFORNIA DEPARTMENT OF FISH & WILDLIFE	CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE	DEPARTMENTS OF PUBLIC HEALTH	LOCAL AUTHORITIES
Fisherman's Retail License	Weighing Scale Certification	Processed Food Registration	Each county has a local health department that sets requirements for selling to retail.
Fish Receiver's License		Temporary Event Permit/Temporary Food Facility Permit	
Fish Processor's License		Food Facility Permit	
Multifunction Fish Business License		Food Safety Certificate	
		Food Processing Permit	

Figure 1. Regulations, permits, and more for buying and selling fish and shellfish in California, by agency.

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE (CDFW)

There are four types of CDFW commercial fish business licenses that may be appropriate for seafood harvesters selling their catch through seafood alternative markets. Harvesters should check the information sources above and contact CDFW directly for up-to-date information and to determine the requirements that apply to their specific situation.

If you have questions or for more information regarding these licenses, please call CDFW Commercial Licensing Customer Service at 916-928-5822 or email LRBCOMM@wildlife.ca.gov.

CDFW LICENSE & REVENUE BRANCH

Website: <https://wildlife.ca.gov/Licensing>

Contact: Commercial Licensing Customer Service

Phone: 916-928-5822

Email: LRBCOMM@wildlife.ca.gov

FISHERMAN'S RETAIL LICENSE

The Fisherman's Retail License is required for fishermen selling all or a portion of their catch to the ultimate consumer. It does not allow for wholesaling, processing, receiving or selling others' catch, or importing product.

This license is not required if you have a Fish Receiver's License (see next section), and cannot be used by others (e.g., spouse, business partner, employee) at any time, only by the licensed fisherman.

The annual fee for a Fisherman's Retail License is \$130.81 (2024, subject to change).

FISH RECEIVER'S LICENSE

This license is required for fishermen selling all or a portion of their catch to someone other than the ultimate consumer (e.g., restaurant, retail market), as well as for fishermen who purchase fish from another commercial fisherman who is not licensed as a fish receiver. It is also required if fishermen are processing the catch, along with a Fish Processor's License (see next section).

The Fish Receiver's License can be used in place of the Fisherman's Retail License, and is not required if you are selling to a person who has a Fish Receiver's License.

The annual fee is \$1,019.00 (2024, subject to change).

FISH PROCESSOR'S LICENSE

In addition to a Fish Receiver's License (see previous section), the Fish Processor's License is required for fishermen who process fish for sale or delivery to individuals other than the ultimate consumer (e.g., restaurant, retail market).

Processing includes cleaning, cutting, gutting, scaling, shucking, peeling, cooking, curing, salting, canning, breeding, packaging or packing fish. This license is not required if cleaning, heading, gutting or chilling catch onboard solely to maintain fish quality.

The annual fee is \$1,019.00 (2024, subject to change).

MULTIFUNCTIONAL FISH BUSINESS LICENSE

The Multifunctional Fish Business License allows fishermen to conduct any combination of the activities of a fish receiver, fish processor, fish wholesaler, fish importer and fisherman retailer.

The annual fee for this license is \$2,535.50 (2024, subject to change).

CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE (CDFA)

The following section provides selected information about CDFA Division of Measurement Standards requirements for fishermen selling their catch through seafood alternative markets. Fishermen should check the information sources above and contact CDFA directly for up to date information and to determine the requirements that apply to their specific situation.

CDFA DIVISION OF MEASUREMENT & STANDARDS

Division Website: <https://www.cdfa.ca.gov/dms/>

County Contact List: <https://www.cdfa.ca.gov/exec/county/documents/countycommissionersealercontactinfo.pdf>

CA's Sealers of Weights & Measures: <https://www.cdfa.ca.gov/exec/county/Sealer.html>

Phone: 916-229-3000

Email: dms@cdfa.ca.gov

WEIGHING SCALE CERTIFICATION

Scales used to sell seafood must be approved and registered. Seafood must be sold by weight, not piece.

Appropriate scales are available from scale dealers. Before purchasing and using a scale, obtain the type of approval and the associated type-approval number of the scale from the dealer or scale manufacturer.

Counties have different procedures for testing and registering scales. Whereas some require that the scale be brought into their office for testing, others will arrange for an inspector to come out and test the scale for a fee.

Scale registration and associated fees vary and are assessed by each county.

Seafood product that is weighed and packaged without the customer present must be labeled with the product name, net weight, price per unit and total price as specified in NIST Handbook 130, Uniform Packaging and Labeling Regulation. Additional information also may be needed on the label per the Fair Packaging and Labeling Act.

If you have questions or for more information regarding the Weighing Scale Certification information, please call the Division of Measurement Standards (DMS) at 916-229-3000, or email dms@cdfa.ca.gov.

DEPARTMENTS OF HEALTH

Both state and local public health agencies regulate and assist with seafood safety, ensuring that seafood is handled and distributed in a safe and sanitary manner. Fishermen should check the information sources provided below and contact both the California Department of Public Health's Food and Drug Branch and the local (county and/or city) environmental health department directly for up-to-date information and to determine the requirements that apply to their specific situation.

CALIFORNIA DEPARTMENT OF PUBLIC HEALTH (CDPH)

CDPH Food & Drug Branch

CDPH's Food and Drug Branch (FDB) registers, inspects, and oversees the processing, handling and distribution of food products, including seafood, within the State of California. The following provides selected information about FDB requirements that may apply to fishermen selling their catch through seafood alternative markets.

PROCESSED FOOD REGISTRATION

Registration is required prior to initiating processing,* unless product is processed and sold on-site at a retail food facility (e.g., restaurant, fish market).

Fishermen must evaluate whether a Hazard Analysis and Critical Control Point (HACCP) plan is required for your processing operation.

Processing in the City of Vernon and/or Los Angeles and in the counties of Orange and/or San Bernardino also requires a local Food Processing Permit (see next section).

* The FDA defines **processing** as handling, storing, preparing, heading, eviscerating, shucking, freezing, changing into different market forms, manufacturing, preserving, packing, labeling, dockside unloading, or holding fish and fishery products. This excludes practices such as heading, eviscerating, or freezing solely to prepare a fish for holding on board a commercial fishing vessel.

If you have questions or for more information regarding registration, please call the CDPH Food & Drug Branch at (800) 495-3232.

CDPH FOOD & DRUG BRANCH

Website: <https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FoodandDrugBranch.aspx>

Processed Food Registration:

CDPH 8610 (to be used by all counties except Los Angeles, Orange, and San Bernadino)

CDPH 8911 (to be used by Los Angeles, Orange, and San Bernadino counties only)

Phone: 800-495-3232

Email: LRBCOMM@wildlife.ca.gov

COUNTY & CITY ENVIRONMENTAL HEALTH DEPARTMENTS

County and city environmental health departments oversee the sales of food products (processed and unprocessed) to the ultimate consumer through retail food facilities, including but not limited to restaurants, retail markets, and fishermen's/farmers' markets. Requirements and fees vary among both local environmental health departments and types of seafood alternative markets. The permits and certifications listed below, as well as others, may be required by a given environmental health department.

Fishermen should contact their local environmental health department directly for up-to-date information and to determine the requirements that apply to their specific situation. For more information, contact the Department of Health in the county in which you will be operating your business (see county contact list below).

COUNTY & CITY ENVIRONMENTAL HEALTH DEPARTMENTS

County Contact List: <https://www.cdph.ca.gov/pages/localhealthservicesandoffices.aspx>

TEMPORARY EVENT PERMIT (AKA TEMPORARY FOOD FACILITY PERMIT)

This permit may be required if you are selling seafood at an open-air fishermen's or farmers' market. Permits may be required for each vendor and/or the organizer.

FOOD FACILITY PERMIT

The Food Facility Permit may be needed if the catch is sold from a mobile unit (e.g., food truck) or fixed (permanent) facility (e.g., retail market). It may also be required when storing seafood before it is distributed (e.g., CSFs, seafood buying clubs).

FOOD SAFETY CERTIFICATE

This certificate is required for retail food facilities that prepare, handle or serve unpackaged foods.

For temporary food facilities, an owner or person in charge must be able to demonstrate adequate knowledge of food safety principles as they relate to the operation. In this case, a Food Safety Certificate is highly recommended but is not required.

FOOD PROCESSING PERMIT

The Food Processing Permit is required when selling processed food products to the ultimate consumer in the City of Vernon and/or Los Angeles and the counties of Orange and/or San Bernardino, in addition to the Processed Food Registration issued by CDPH FDB.

LOCAL AUTHORITIES

Depending on the type of market and where it is located, additional permits and fees may be required by local authorities. Below are a few examples of such local requirements.

Fishermen should contact local authorities directly for up-to-date information and to determine the requirements that apply to their specific situation.

COUNTY

County government (planning departments) may require meeting zoning regulations and providing proof of permission from appropriate agencies (e.g., state highway division, county road office) when selling from a vehicle or stand on a public right-of-way or from property owners if selling from private property.

CITY

City government may require a business license, vendor's license, or both if selling from a vehicle or stand within city limits. Selling from private property requires proof of permission from the property owner, having an appropriate business license, and meeting local zoning requirements.

HARBOR/MARINA

Local harbors/marinas may have their own requirements for selling one's catch off the boat or at a dockside (or fishermen's) market. In some cases, only certain products or types of markets are allowed, or there may be time and seasonal restrictions on direct selling.

Appendix I

BUSINESS PLAN OUTLINE*

The following outline for a business plan details the type of information that should be included under each category. Please note that not all parts will be applicable to every business. Similarly, there may be additional categories that should be included.

Title Page

- Business Name
- Purpose (Planning and/or Financing Proposal)
- Name of Principals
- Contact information

Executive Summary

Describes the purpose and/or goal of the business plan and summarizes the major points of the business plan. This summary should be one or two pages and should highlight the important facts that are described in detail within the plan.

Table of Contents

List all of the headings within the plan and the pages on which they are located.

Description of Business

- Mission statement
- Type of business/industry
- Status of business (startup/existing/expanding)
- Form of business (sole proprietor/partnership/corporation)
- Location (address)
- Physical features of building
- Own or lease facility
- Hours of operation/seasonal (peaks/valleys)
- Background and history
- Future goals/objectives/strategies
- Products/services (description/customer benefits)
- Target market

Market Company Analysis

- Company goals/focus
- Company strengths/weaknesses
- Niche market

Product/Service

- Description of products/services
- Benefits to consumers
- Compare to competitors

Consumers

- Type of consumers (wholesale/retail)
- Products/services purchasing
- Factors affecting purchasing decisions (politics/economics/etc.)

Competition

- Primary competitors
- Competitors' products/services
- Evaluation of product/service (similar/dissimilar)

Marketing Plan

- Overall market description
- Size/growth and trends
- Market segments
- Market projections
- Products/service (brand name/quality/scope/package/warranty)
- Pricing (list price/discounts/payment terms)
- Distribution (channels/locations/logistics)
- Promotion (advertising/public relations/trade shows/partnerships)
- Sales force and forecast
- Market growth potential

Management

- Management team (include resumes)
- Business background/management experience
- Division of responsibilities of management team
- Strengths/weaknesses of team
- Salary and/or payment plan
- Benefit plan

Outside Management and/or Assistant Needs

- Personnel
- Personnel needs
- Skills required
- Training requirements/availability
- Full-time/part-time
- Salary/hourly
- Benefits
- Employee policies/contracts

Financial Data

- List of capital equipment
- Source and application of startup capital
- Inventory control system
- Accounting system
- Three-year profit and loss statement (income and expenses)
- Three-year balance sheet (assets, liabilities and owner equity)
- Cash flow (projected monthly breakdown of when money comes in and goes out, where money came from and what it was spent on)

- Break-even analysis (level at which total revenues and total expenses equal; no profit/no loss)
- Explanation of assumptions for all financial documents
- Three years of tax returns (company and principals)

Supporting Documents

- Contracts/leases/agreements
- Copies of licenses/permits/certifications/etc.
- Community support
- Marketing research information
- Credit reports
- Principal current financial statements
- Resumes
- Tax returns

For an electronic fisheries business plan template, see Alaska Fish Business Plan Writer, available from Alaska Sea Grant's Fisheries Business Assistance Project ("FishBiz"). Request a free CD from the Alaska Sea Grant Marine Advisory Program, or download the program by going to <http://www.alaskafishbiz.org> and following the link to fisheries business management.



Photo Courtesy of Alaska Seafood

Appendix J

GLOSSARY OF SEAFOOD BUSINESS TERMS*

Accrued expense – An expense incurred but not yet paid.

Amortization – The gradual reduction of a debt by means of periodic payments sufficient to meet current interest and extinguish the debt at maturity.

Assets, capital – Those assets which are not readily convertible into cash and in the ordinary course of business are not so converted. More often called fixed assets.

Assets, liquid – Those assets, generally current, which may be quickly turned into cash.

Break-even analysis – a method used to determine the point at which the business will neither make a profit nor incur a loss. That point is expressed in either the total dollars of revenue exactly offset by total expenses; or in total units of production, the cost of which exactly equals the income derived by their sale.

Broker – An agent who sells a product for the owner for commission. Usually brokers do not buy product or acquire any ownership. Fees usually are 3 percent to 5 percent of the sales price.

Business plan – An objective, written review of your business to identify areas of weakness and strength, pinpoint needs, and begin planning how you can best achieve your business goals.

Cash flow – The sources and uses of a company's cash funds over a designated period.

Cash position – The percentage of cash to total net assets indicates relative cash positions. It includes cash and United States government securities and is the net amount after deducting current liabilities.

CIF – Cost, insurance, freight. The price an importer or wholesaler pays for fish that has been processed and for which insurance and freight fees have already been paid. It is processor cost plus freight and insurance.

C&F – Cost and freight. Same as above without insurance paid.

Collateral – Property that is pledged as security by a borrower to a lender as assurance that a loan will be repaid. It may be a tangible item such as a vessel or a piece of land and building; it may be intangible such as a trade receivable owed to you; or it may be both.

Corporation – a form of business organization that may have many owners with each owner liable only for the amount of his/her investment in the business. As defined by the Supreme Court of the United States, a corporation is an artificial being, invisible, intangible and existing only in contemplation of law. Structuring your business as a corporation, or limited liability corporation, offers some liability protection benefits if selling your own catch.

Current assets – Those assets which are readily convertible into cash without substantial loss; these include cash, investments, notes and accounts receivable, and inventories.

Current liabilities – Those obligations ordinarily intended to be paid in the usual course of business within a relatively short time, normally within a year, out of earnings.

Current ratio – The ratio of current assets to current liabilities, indicating the ability of a business to pay its current liabilities in cash as they fall due.

Custom processing – Service provided for a fee on products owned by a customer other than the processor. Custom processing could be as little as washing and boxing or as complex as portioning, smoking, and vacuum packaging.

Debt capital financing – Money borrowed with the intention of paying it back plus interest.

Debt to worth ratio – a ratio of your business' total liability to its net worth.

Depreciation – Expiration in service life of fixed assets, other than wasting assets, attributable to wear and tear through use and lapse of time, obsolescence, inadequacy or other physical or functional cause.

Distributor/wholesaler – An agent who buys large lots of product, transports and possibly warehouses it, and then sells small quantities to many food-service or retail outlets.

Dividends – The proportion of the net earnings of a corporation paid to the stockholders as their share of the profits.

Eastern cut – Fish product form with head removed but collar left on.

Entrepreneur – One who assumes the financial risk of the initiation, operation and management of a given business or undertaking.

Equity – The monetary value of a property or business that exceeds the claims and/or liens against it by others.

Equity capital financing – Money given to your business, without the intention of paying it back, in return for part ownership in your business.

Export – Send outside the country of origin.

Ex-vessel – The price paid to fishermen for raw (unprocessed) fish.

Filet, fillet – (pronounced “fi-lay” and “fill-et”) – Two words for the slice of meat taken from each side of a fish outboard of the backbone and ribs, from behind the gills to the isthmus caudal peduncle before the tail. May include some bones unless identified as bone-out.

Fletch – a fillet of a halibut, consisting of one whole side of the fish, above and below the backbone and running from behind the gill plate to the caudal peduncle.

Food-service industry – The group of food providers that includes restaurants, hotels and cafeterias in establishments like schools, hospitals, nursing homes, prisons and businesses.

FOB – Free on board. a term used in a sales agreement that specifies that the buyer is responsible for all transportation costs including freight and insurance from the location designated on the shipping document.

Glaze – a solution applied to a frozen product designed to seal the surface and protect it from dehydration and oxidation.

Guaranty – a written commitment by an individual or authorized legal entity to pay back a loan in the event the borrower is unable to do so.

HACCP – Hazard Analysis Critical Control Point. a seafood safety assurance plan based on identifying and monitoring those points in the process system where contamination could occur.

H&G – Headed and gutted.

IFQ – Individual fishery quota.

Ikura – Japanese, from the Russian “ikra” for fish eggs, ikura is salmon caviar—individual salted eggs, as opposed to sujiko, see below.

IQF – Individually quick frozen.

Inventory – The amount of product currently kept in storage ready for sale. Carryover is inventory at the beginning of a new season which remains from the previous season.

Leverage – The relationship of other people’s money (debt) in relation to your own investment (equity) in your business.

Liquidity – Solvency of a business; the degree of readiness with which assets can be converted to cash. If assets cannot be converted into cash to meet current liabilities, the firm is said to be illiquid.

Management – The administration and policy makers of a business; those responsible for planning goals and objectives.

Market – The number of people and their total spending (actual or potential) for a product line within the geographic limits of the seller’s geographic ability. Also, the geographical area itself. Also, the ethnicity or other characteristics of a group of consumers. Also, the particular processing company that buys product from a fisherman. Also, as a verb, to conduct the activities (including research, product positioning and advertising) needed to bring a product to the attention of purchasers and get them to buy.

Marketing – The business of tailoring the right mix of product form, price and promotion to a specific segment of the population to meet a sales goal.

Market niche – a segment of the population that buys a certain product because it suits their needs in terms of product form, price, packaging and promotion style.

Metric ton – 2,200 pounds.

Net worth – The excess of the assets of an individual or an enterprise over all his, her or its liabilities.

Niche market – a small group of consumers, defined by ethnicity, geography or some other feature, that allow them to be targeted by a sales effort for a small quantity of product.

Partnership – Two or more persons who are associated in order to pursue a business for profit.

Portion – a piece of fish (e.g., steak or piece of fillet) which is cut to a specific and uniform weight.

Princess cut – Gilled and gutted, with the throat latch left intact.

Processing – Any of various mechanical activities that prepare a fish for storage, transport and consumption by removing unwanted parts of it and stabilizing it by freezing or cooking. Secondary or value-added processing may include portioning, smoking, curing or other treatments that improve flavor or make the fish more user-friendly.

Processing yield – Processed weight divided by the original whole fish weight. The result is given as a percentage.

Pro forma – a projection or estimate of what may result in the future from actions in the present. a pro forma financial statement is one that shows how the actual operations of the business will turn out if certain assumptions are realized.

Profit – The excess of the selling price over all costs and expenses incurred in making the sale.

Receivable – An asset in the form of an amount which is due from a borrower.

Recovery rate – The percentage of round fish weight that remains after processing.

Retail – The final link in the distribution chain where the product is sold to the consumer. Fish markets and supermarkets are considered retail outlets; restaurants and institutional food-service facilities usually are not.

Retro – a payment to fishermen as a bonus or incentive that is above, and usually comes later than, the grounds price settlement.

Rigor mortis – Literally “stiffness of death,” the muscle tension that occurs some hours after a fish expires. Product processed and frozen pre-rigor is generally higher quality when it thaws.

Round – Whole. Round fish is whole, unprocessed fish, and round fish weight is the total weight of the catch before heading and gutting, and grading or culling inferior grade fish.

Shrinkage – The loss of weight of product between its purchase and sale due to “drip” (loss of fluid from the flesh) as well as from product that doesn’t sell before it goes bad.

Sole partnership – Ownership by one person of an entire business.

Sourcing – The process of finding product to purchase for subsequent resale.

Sujiko – Japanese for salmon eggs processed and sold in the skein rather than separated out, as in ikura.

Surety bond – a cash deposit, pledge of property or insurance policy that is forfeited if the entity posting the bond fails to comply with requirements for which it is posted, such as remitting taxes, paying employees or performing the contracted service.

Trader – One who buys and sells on behalf of another company and, unlike a broker, takes ownership of the product.

Tramper – a cargo ship that is chartered by voyage rather than running on a scheduled route. Trampers are commonly chartered to transport Alaska fish to Japan at the end of the season.

Uni – Japanese for sea urchin gonads.

Value added – Further processing or packaging of a product that enables the product to sell for a higher price.



Photo Courtesy of Alaska Seafood

Appendix K

TOOLS FOR DIGITAL MARKETING

The following definitions relate to the next page which offers a comparison chart of nine digital marketing tools to help determine which tool(s) may be right for you.

Cost: Many online marketing tools are free to download and use. However, more advanced features may require paying a fee. The more dollar sign icons, the higher the fee.

Primary Technology: Different devices may be required for using online marketing tools. Icon(s) indicates what is required, a smartphone, computer, or both.

Time to Create: Each platform requires time to set up an account. Some platforms take more or less time to join or create. 1 clock < 30 minutes; 2 clocks < 2 hours, 3 clocks > 2 hours.

Time to Maintain: Creating content for online marketing has variable time commitments. Some tools require frequent updates, while others have minimal maintenance. 1 clock < 30 minutes per week; 2 clocks < 2 hours per week; 3 clocks > 2 hours per week.

Ease of Use: Online marketing tools vary in complexity. 3 thumbs up = easy to use; 2 thumbs up = most features are easy to use, but a few features are more complicated; 1 thumb up = more challenging to use initially.

Target Age Range: The platforms are used by persons of varying ages. The range provided indicates that more than 30% of individuals in this age range reported using the platform.

Level of Interaction: The tools have varying levels of interactivity with customers, which may require additional time commitment. 1 person = customers can interact via features you select; 2 people = customers can interact via likes, comments, and direct messages; 3 people = customers can interact via likes, comments, direct messages, and video responses.

Public Reach: Some tools make it easier to reach new customers than others. 1 person = customers must look for your business to find it; 2 people = customers may find your business through the platform's algorithm; 3 people = customers are likely to find your business through the platform's algorithm.

Ease of Access for Customers: Some marketing tools require customers to have an account with the platform to access the content you produce. 3 thumbs up = no limits to access; 2 thumbs up = customers can view your content, but may have limited interaction; 1 thumbs up = customers can only access your content if they have an account on the platform or opt-in to a subscription list.

Paid Visibility: Some tools allow you to pay to increase the number of people who see your content. a checkmark indicates this feature is available.

Online Sales: Some tools offer sales directly through their platform, which enables customers to purchase your products without leaving the app. a checkmark indicates this feature is available.

Notes

Facebook and Instagram are both Meta platforms, so they can be managed together using Meta Business Suite. This allows you to publish the same content on both Facebook and Instagram at the same time, with some limitations.

Level of Interaction is based on standard settings provided in these tools. These settings may be adjustable to some extent.

Digital Marketing Tools At-a-Glance

Comparison chart of nine digital marketing tools to help determine which tool(s) may be right for you.

Sea Grant	Email or Text Blast	Website	Online Sales Website	Meta Business Suite		X (Formerly Twitter)	LinkedIn	TikTok	YouTube
				Facebook	Instagram				
Cost	\$	—	\$	—	—	—	—	—	—
Primary Technology									
Time to Create									
Time to Maintain		—							
Ease of Use									
Target Age Range	—	—	—	18 - 65+	18 - 64	18 - 49	18 - 64	18 - 29	18 - 65+
Level of Interaction	—	—							
Public Reach									
Ease of Access for Customers									
Paid Visibility	—	✓	✓	✓	✓	✓	✓	✓	✓
Online Sales	—	—	✓	—	✓	—	—	✓	—



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