

Seafood Market Diversification in the Post-Pandemic Era



Acknowledgements

This report was prepared by Policy Analyst Intern Maya Bhadury and made possible with the help and collaboration of colleagues. Maya would like to thank the experts she spoke with for sharing their experiences and insights from the pandemic, which grounded and enhanced this report.

About Virgil Group

Virgil Group is a woman-owned nonpartisan startup dedicated to furthering impactful conservation and sustainable commerce by contributing to the development of new tools, policies, and cross-sector partnerships. Visit virgilgroup.com to learn more about our services, mission and opportunities.

Executive Summary

The COVID-19 pandemic had immediate and significant ramifications for the seafood industry. With restaurants closed and distribution channels disrupted, many fishermen turned inwards, leaning on their community for support. This pivot dovetailed with a shift in consumer interest towards local and sustainable seafood options, the result of which has been a surge in direct sales facilitated by various marketing strategies.

During the pandemic, interest in community-supported fisheries spiked and social media interactions with fishermen grew. Government-created resources to connect fishermen to local customers launched and seafood donation programs using philanthropic funding expanded. Online grocery platforms, like Amazon Fresh and Mercato, drew in even more customers who have since become familiar with grocery deliveries and government purchasing of seafood increased, opening opportunities for large suppliers. Studying this market expansion and how fishermen adapted to it offers insight into potentially underutilized sales opportunities. It is important that small-scale fishermen looking to diversify their markets take note of these opportunities, especially since industry leaders are optimistic that trends in consumer behavior developed during the pandemic will persist.

Through stakeholder interviews and a literature review, we have attempted to collate the most common pivots fishermen made during the pandemic, as well as their level of success and recommendations for implementation. This report orders these pivots from low investment to high investment. We conclude that creating a vibrant online presence is key for reaching diverse audiences, and government support in hosting and organizing direct sale marketing is important during times of crisis.

As shocks to the seafood industry become more frequent due to climate change and reliance on global supply chains, understanding and applying diverse marketing strategies will become even more important for fishermen worldwide.

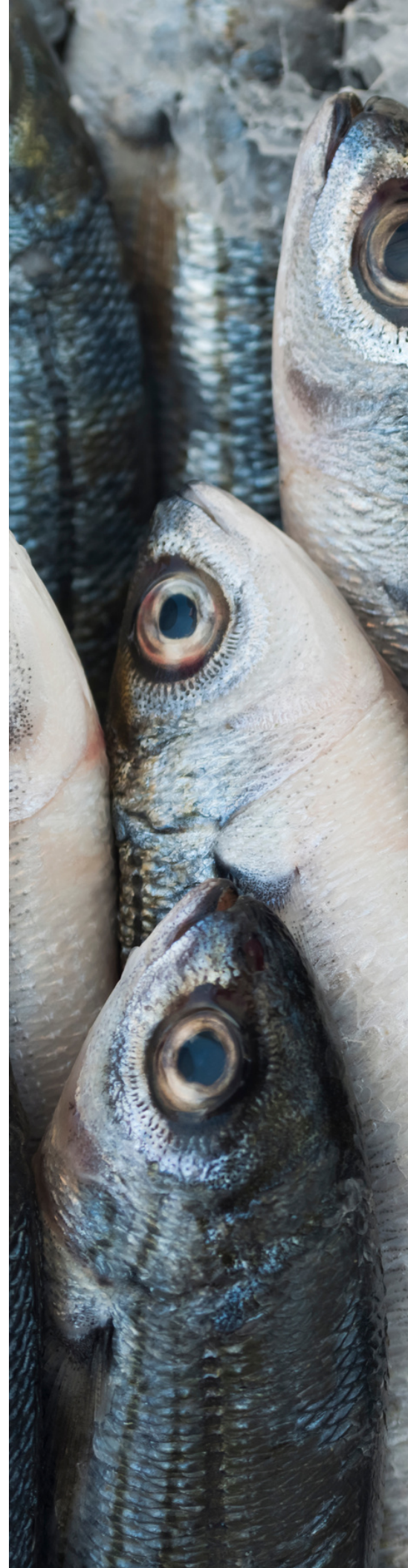


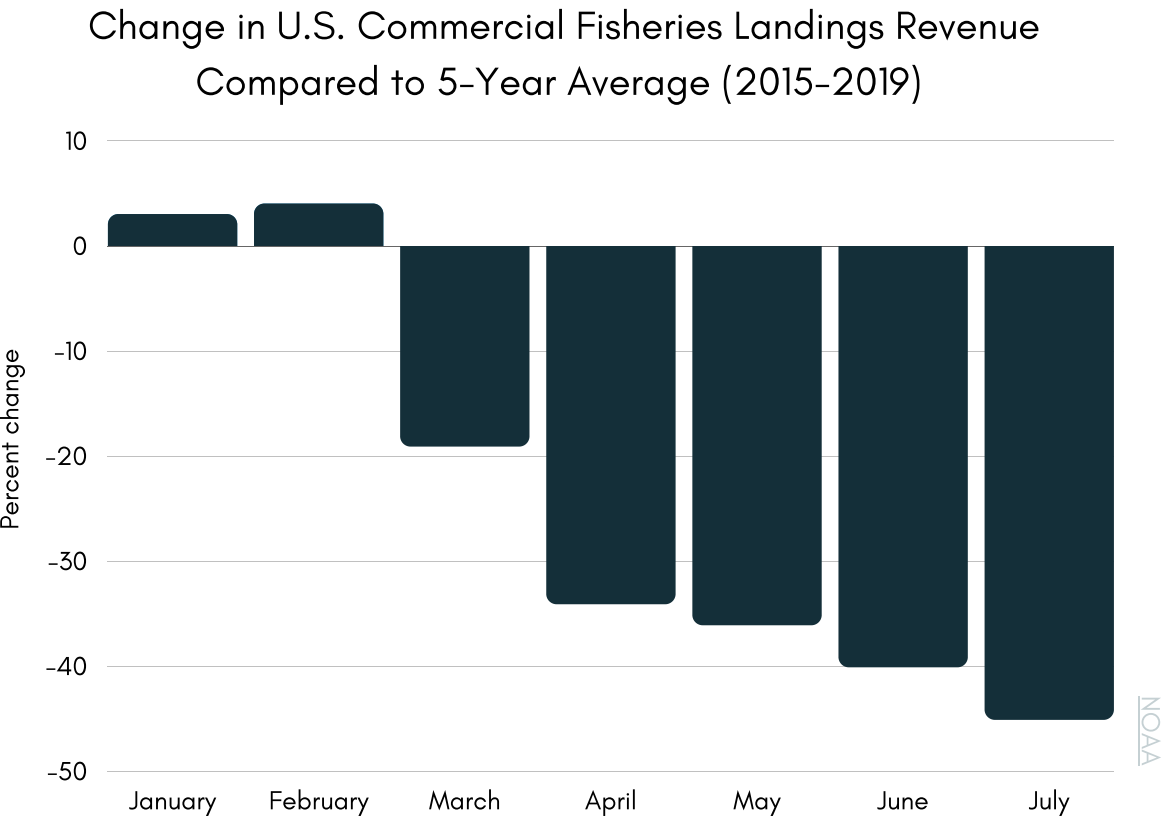


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Seafood and the Pandemic

Fishermen experienced some of the first effects of the pandemic, which would go on to affect every sector of the economy. In February 2020, international demand for lobster disappeared overnight when China, one of America’s largest seafood trading partners, banned live animal imports. At the same time, China underwent a wave of lockdowns, causing a drop in consumer demand. Soon after, the United States began shutting down restaurants. By March 16, 2020, 19 states banned indoor dining. Before the pandemic, U.S consumers purchased almost 70% of their seafood from restaurants. According to NOAA, this sudden drop in demand caused monthly landings revenue to fall across the country.



Vendors had to contend with pressure on both ends of their business: an inconsistent supply from fishermen and unstable customer demand. In May 2020, Pacific Seafoods shut down an Oregon processing facility for two weeks after an employee contracted COVID-19. The plant is capable of processing 210,000 pounds of seafood per day. One month later, the plant, this time along with four others owned by Pacific Seafoods, shut down again after another outbreak. Fear of contracting COVID-19 on a small fishing boat or lack of profitability deterred some fishermen from going out at all.

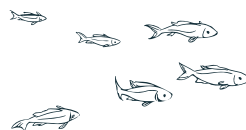
With widespread grocery store shortages and restaurant closures, retail purchasing options became an attractive solution for consumers. In 2020, retail sales of seafood reached record highs – fresh seafood sales grew more than 25% by late December and e-commerce sales tripled, reaching \$1.1 billion. Though the shift to retail didn't make up for losses in the wholesale and restaurant industry, it kept many small-scale fishermen afloat. By focusing on direct-to-consumer sales, fishermen who normally relied on restaurant sales were able to capture local consumers' demand for seafood. Facebook pages advertising local seafood for sale quickly gained thousands of followers. Community-supported fisheries (CSFs) experienced a boom in demand. Maryland's government created a map of seafood sales and Virginia created an app that connects people looking to purchase seafood with people selling it. Philanthropic ventures supporting seafood donation also ramped up, bringing seafood into even more homes.

"We're just trying to survive, [to] find every avenue we can," – Pierre Juillard, Boston via [CivilEats](#)

"We're trying to stay alive," – Stace Cheverez, Santa Barbara via [NewsPress](#)

"Restaurants closed, everyone stayed home, and I was like, 'Oh no. What do we do now?'" – Captain Eric Hodge, Santa Barbara via [Spectrum News](#)]

Direct sales methods have expanded and developed during the pandemic, connecting fishermen to new and existing markets. Understanding these methods and how to leverage them going forward is key, in preparation for the next crisis or downturn.



Dockside Sales Marketing



To cope with the uncertainty caused by disruptions to processors and distributors, fishermen across the country began selling their catch directly off the boat. A survey of northeastern fishermen indicated that almost half of fishermen pivoted to this model during the pandemic, and consumers followed their direction. Websites marketing dockside sales experienced a bump in traffic and social media pages advertising local catch quickly gained followers. Fishermen also advertised their catch through mobile applications funded in part by local governments.

SOCIAL MEDIA

Many fishermen developed their websites and turned to Facebook and Instagram to sell their catch during the pandemic. Websites are an easy way for consumers to find information about fisheries and make purchases. The content on a website is more stagnant than social media, which requires regular updating to reach customers. On Facebook, some fishermen created pages or groups to market their individual catch, while others aggregated by area or species. Pick up times and prices were either advertised in the post or negotiated in the comments section with customers. Some wholesalers used Facebook as a way to provide updates on inventory, redirecting customers to their website for sales. Facebook is free to use, but users can pay to promote posts. Using Facebook provides fishermen with a direct line to people interested in their product – consumers get a personalized experience and feel connected with their community. Some fishermen run an Instagram account as well, primarily using it to provide updates on catch; sales are usually conducted through an external website or dockside. Instagram is another low cost, high reach platform, especially if effectively used.

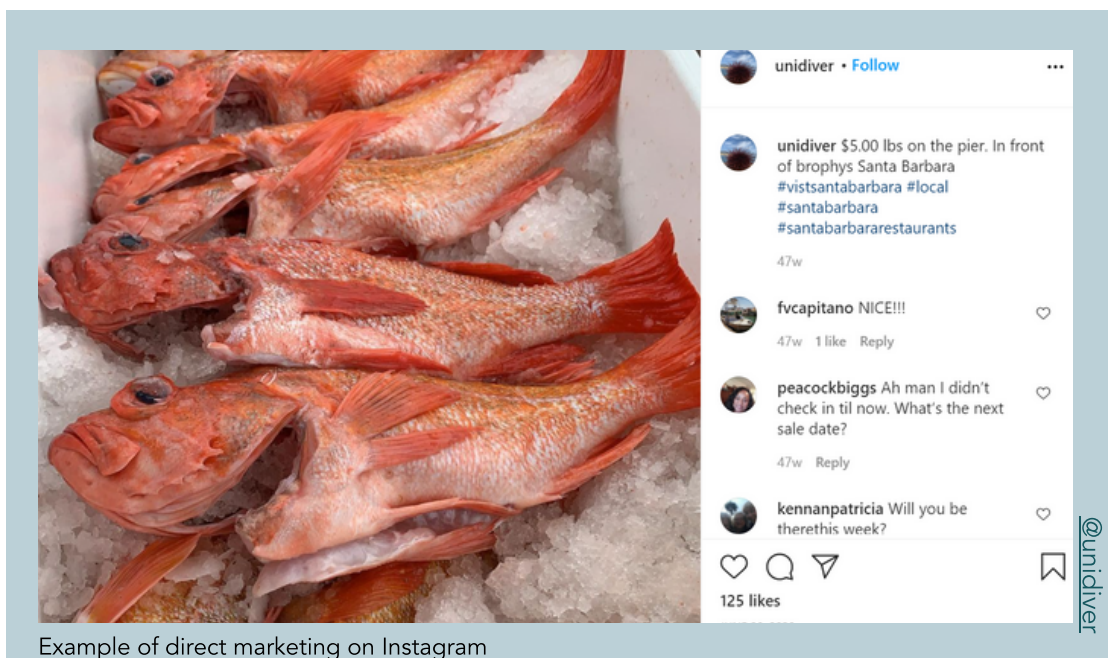
The F/V Endurance is out at sea cutting Scallops as we speak! They will be ready for pickup between 4:00-5:30 PM Tomorrow, Sunday 5/3.
They are day boat scallops (less than 24 hrs dock to dock, so fresh as can be) Roughly 15 count scallops, which are reflected in the price!
\$15/lb - 2 Pound Minimum - Cash Upon Pickup!
Pickup in New Bedford, exact location and pickup instructions to be sent out via email once pre-orders are full!
Order below
<https://seafood-direct.com/orders/scallopOrder>



Example of direct marketing on Facebook

Recommendations for Dockside Sales Social Media Marketing

1. Consider creating a Facebook page if you will be able to regularly update the page, provide a majority of its content, and maintain engagement.
2. Consider creating a Facebook group if you only want to create an information center and allow anyone to market catch on the site.
3. Consider creating an Instagram account if you have regular access to high quality photographs.
4. When marketing products on social media,
 - a. Pursue place-based marketing strategies, such as using photos of local fishermen.
 - b. Tag your city and use hashtags like #lobster, #buyfresh, #buylocal, and #shopsmall.
 - c. Consider purchasing social media advertisements that include a clear call to action, like an upcoming sale.
 - d. Post regular updates and respond promptly to comments to maintain engagement.
 - e. Post instructional videos or articles about preparing whole fish, as well as recipes using local species.
5. Consider creating a website through which customers can make purchases. Websites should be consumer-oriented, with high quality images and a simple interface.



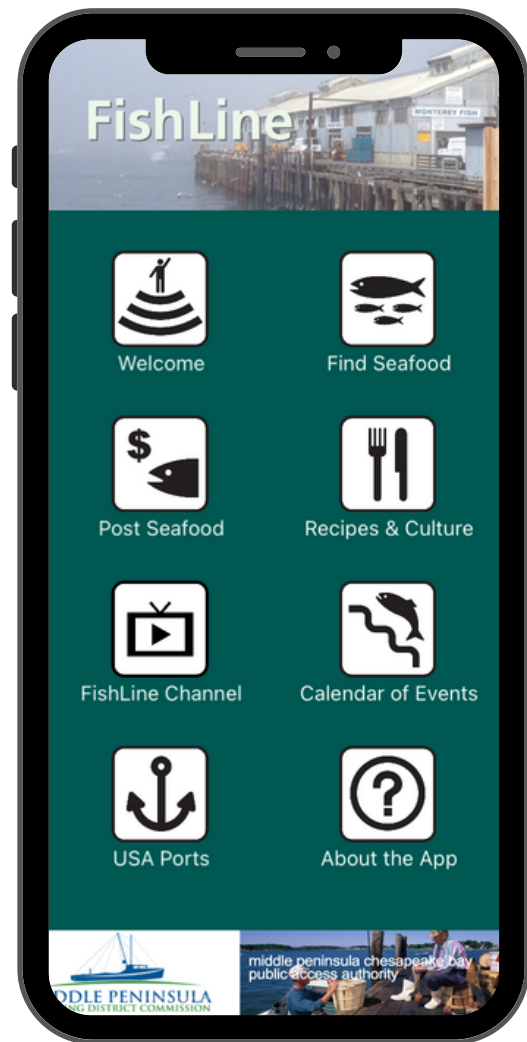
Example of direct marketing on Instagram

MOBILE APPLICATIONS



Mobile applications that connect local, small-scale fishermen with consumers have been around since 2012. [Fishline](#) is the dominant app for the West Coast, and its team has collaborated with local governments to develop the app for other areas. Through the app, customers can browse sellers based on location, products, or payment method. Suppliers can create a profile with this information and their contact details. Purchasing is usually done outside the app, to avoid transactional costs. The mobile platform is especially important for rural areas, where access to the Internet may be limited.

In 2020, several eastern states developed the app for their regions. Interest in this matchmaking app was high: in Virginia, people downloaded the app before it was widely publicized, and in Rhode Island 500 people downloaded the app within the first two weeks of launching. These apps were usually funded through grants and developed in collaboration with local governments, nonprofits, and the Fishline team.



Recommendations for Marketing through Mobile Applications

1. Approach your local environmental or fishery department about using grant funding to create an app that connects small-scale seafood suppliers with consumers, using expertise from the team at Fishline if possible.
2. Create a team that has relationships in the community to monitor the upkeep of the app and promote its development.
3. Promote the app widely with fishermen to ensure there is product available for customers.
4. Host transactions outside of the app to avoid extra costs.

STATE GOVERNMENT RESOURCES

Several states have created online databases of local seafood distributors. Maryland's Department of Agriculture released an [interactive map](#) with product information and location for local agricultural and seafood producers. The Massachusetts Division of Marine Fisheries created a [webpage](#) with information on seafood retail locations. [Rhode Island](#), [New Hampshire](#), and [Connecticut](#) used NOAA Sea Grants to develop webpages with sellers' location, offerings, and contact information. These resources provide exposure for fishermen in an official, permanent format.



True Blue Seafood Market Details

Name	Tuckahoe Seafood
Address	12056 Cordova Rd.
City	Cordova
Zip Code	21625
Phone	410-820-2131
Website	www.tuckahoeseafoodmd.com
Type	Retail

Maryland's Local Food Options map. Selecting a blue icon provides more details.

A key issue that fishermen face with off the boat sales is the permitting requirements. States require separate permits for processing seafood dockside, so some fishermen choose to sell whole fish instead. This can be problematic, since many consumers are uncomfortable with, or unknowledgeable about, preparing whole fish. Although regulations vary by state, in general fishermen are also required to have permits to sell directly to consumers. At the beginning of the pandemic, some states, like [Massachusetts](#) and [Rhode Island](#), modified their permitting requirements in order to get direct sales permits to fishermen more quickly or cheaply. During times of crisis, it's important that fishermen request these same modifications, and ensure that reporting requirements do not make the permits inaccessible.

Recommendations for Leveraging State Government Resources

1. Members of the Sea Grant network should consider using funds to develop a database of local fisheries and marketing resources.
2. Ensure that you create and maintain a profile on relevant state websites.

Online Grocery Platforms

With more people dining at home, some fishermen expanded their sales to online grocery platforms like Mercato, Fresh Direct, and Local Harvest. Creating a profile on these platforms often entails a monthly fee. Red's Best, a wholesaler out of Massachusetts, tapped Mercato, an online grocery ordering and delivery service, to market its products. The site lets small-scale and local distributors create a "shop" with their items, from which customers from nearby ZIP codes can purchase. A third-party courier service delivers the goods and suppliers have access to marketing services and consumer insights. During the pandemic, 55% of seafood consumers tried buying seafood online for the first time, and platforms like Mercato provided a way to do that. Between March and May of 2020, Mercato expanded its operations to 26 more states and experienced a 5,000% increase in sales.



An online marketplace for small-scale and specialty grocers. Delivery available in 45 states.



A hub for East Coast grocers, with a focus on fresh and local items. Delivery available in seven states.



A directory of farmers' markets, family farms, and community-supported agriculture programs for select cities.

The Alaska Seafood Marketing Institute has been using the "clickable recipe" functionality of Amazon Fresh for a few years. Clickable recipes allow consumers to shop all the ingredients in a recipe featured on the site with one click. Adding a recipe to Amazon requires a partnership with a major media company that owns a large recipe website. Such a partnership is best facilitated by a marketing consultancy or state government seafood marketing department. Before the pandemic, Amazon Fresh experienced year over year growth. By July of 2020, online grocery sales on Amazon had tripled.

Recommendations for Using Online Grocery Platforms

1. Pursue a relationship with an online grocery platform if you have the capacity to maintain an online "shop" and readily process and freeze your product.
2. After joining, take full advantage of the marketing services and product analytics offered by the platform, if they are available.

Community-Supported Fisheries (CSF)

The community-supported model has been around for some time; however, since the beginning of the pandemic, interest in the model has sharply increased. Alaskan's Own, a CSF based out of Sitka, saw its sales double in 2020; Real Good Fish, a CSF based out of Moss Landing, expanded delivery to six states.

In a typical CSF, customers pay a subscription fee to receive or pick up a prespecified poundage of seafood sourced by local fishermen. Often, customers don't know the exact type of fish they will receive since catch is dependent on weather conditions and seasonality. CSFs usually list a selection of seafood on their website that consumers may receive and some CSFs let customers opt-out of certain species. Community-supported aquaculture (CSA) is also becoming popular. Emily Selinger, owner of Emily's Oysters in Maine, said, "The CSA model is well-suited to aquaculture [because] we have a good sense of how much product we have on the farm and it's a clever way to get people to buy oysters week after week."

The Local Catch Network (LCN) is a website that hosts over 500 CSFs and smaller fisheries in 20 states. Fishermen can create a profile on the site with details on their location, species caught, and contact information; consumers can search profiles geographically or by keyword. Between March and May of 2020, user traffic on the Local Catch Network in the U.S. was up by 310% compared to the previous year.



Sitka Salmon Shares

The Premium Sitka Seafood Share includes king salmon, Bairdi crab, albacore tuna, and more for \$129/month.



Sitka Salmon Shares

Sitka Salmon Shares offers free delivery through UPS or a home delivery specialist.

CSF models:

Researchers from the University of Maine describe three ways CSFs can be modeled in order to achieve different goals.



Harvester-focused:

These fisher-owned programs aim to support local economies and fisheries. In this model, seafood is distributed when it is available and consumers have little choice in what they receive.



Consumer-focused:

This model aims to increase consumer engagement with local seafood products through regular seafood deliveries. Consumers have more of a say in what seafood they receive and the CSF is usually run by an intermediary.



Species-focused:

This model highlights high-value seafood offered semi-regularly throughout the year. Often, consumers have the option to purchase portions of seafood from the CSF without a subscription.



Species-focused. Targets certain species that evoke Alaska's character.



Consumer-focused. Large team of fishermen and staff supply seafood to local residents and businesses.



Harvester-focused. Conducted only dockside sales to create personal relationship with consumers.
(No longer in business)

Potential benefits of creating a CSF:

- Earning a higher income by bypassing a wholesaler relationship.
- Incurring a stable price by charging customers ahead of time.
- Spreading awareness of fishery issues through your local network.
- Improving the local economy by increasing demand for local seafood businesses.

Potential challenges of creating a CSF:

- Developing and maintaining an online presence and sales platform.
- Bookkeeping and complying with local, state, and federal regulations.
- Managing customer relationships, especially in times of volatility.
- Dedicating bandwidth to marketing, packaging, and delivery of seafood.

Recommendations for CSFs

1. If you own or participate in a CSF:

- Create a profile on Local Catch Network.**
- Develop partnerships with local organizations like farmers' markets, fishermen's alliances, and nonprofits to generate awareness for your CSF.**
- Include preparation instructions, place-based marketing materials, and special add-ons to appeal to consumers' interests and stand out amongst competitors.**

2. If you do not own or participate in a CSF:

- Consider if a CSF is right for you using the decision tree on page 10 and explore these additional resources.**
- In times of crises, contact local community-supported agriculture programs to determine if they would be interested in offering seafood.**



Special add-on: [Emily's Oysters](#) in Maine offers an oyster-shucking lesson, insulated cooler bag, and oyster knife with each subscription.

IS A CSF RIGHT FOR ME?

Is there demand for locally-caught seafood in your community?

YES

NO

A CSF MAY NOT BE SUCCESSFUL

YES

DO I HAVE THE RIGHT PERSONALITY AND SKILLSET TO CREATE A CSF?

NO

Entrepreneurial
Risk-taker
Personable
Conflict resolver
Community-oriented
Attentive to detail

WILL I BE ABLE TO RECRUIT AND RETAIN CUSTOMERS THROUGH EXCELLENT SERVICE AND EFFECTIVE MARKETING?

CAN I EMPLOY PEOPLE TO FILL GAPS IN MY SKILLSET?

NO

YES

YES

NO

A CSF MAY NOT BE SUCCESSFUL

PERFORM MARKET RESEARCH AND DEVELOP A BUSINESS PLAN

A CSF MAY NOT BE SUCCESSFUL

Philanthropic Support

During the pandemic, several small-scale fisheries received philanthropic funding to donate their catch to local food assistance programs. This benefited communities facing widespread food insecurity, and provided a stable market for fishermen during the crisis. It was also a way to connect with the community, building interest in local seafood. Catch Together, a Massachusetts-based nonprofit, provided \$5 million in funding to fisheries across the country in 2020. Their hope was that fisheries could use the funding not only to buy catch for donation, but also to develop value-added products for sale in the market or through the USDA. Indeed, the Cape Cod Fisheries Trust created a haddock chowder using Catch Together funds. The product is currently being donated to local food banks, but the Trust is considering selling units in the future. Though directly receiving philanthropic funding as a small business may seem difficult without a nonprofit designation, utilizing intermediary fiscal agents, like fiscal sponsors, may be an attractive option.

What is a Fiscal Sponsor?

A fiscal sponsor is a 501(c)(3) organization that supports projects which may not have nonprofit status. Fiscal sponsors can have varying degrees of control over projects and often provide administrative support. There are several models of fiscal sponsorship, each with different legal ramifications.



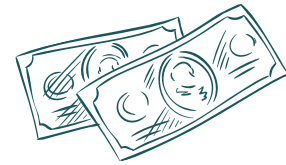
Cape Cod Fisheries Trust

Cape Cod Fisheries Trust's haddock chowder

Recommendations for Utilizing Philanthropic Support

1. Philanthropic support can be leveraged to increase market diversity and resilience by supporting costs to create a value-added product.
2. To leverage philanthropic funding without non-profit status, consider a fiscal sponsorship.
3. To find philanthropic funding, review the University of California Santa Barbara's Market Your Catch page and look into local private foundations.

Government Purchasing



During the pandemic, the government stepped up its funding for USDA Section 32 food purchases. These purchases go to food donation programs and bids are auctioned through the Agricultural Marketing Service. In May of 2020, the government agreed to purchase \$30 million in catfish products, \$20 million in Atlantic haddock, pollock, and redfish, and \$20 million in

Alaskan pollock. In May of 2021, the USDA solicited bids on over eight million pounds of Alaskan pollock. These orders were encouraged by several state elected officials, who believed the government purchases to be crucial for suppliers facing depressed demand during the pandemic. In order to bid on USDA contracts, vendors must go through an approval process, which includes thorough documentation of their processing capabilities, commercial history, and financial background.

Some states include line items in their budget to purchase food for local food banks. Since the amount being purchased is less than the quantities requested by the USDA, smaller operations can more easily participate. Prices are often below market rate.

USDA Seafood Purchases in 2020

Bid	Company awarded bid	Species
\$25,140,000	Frozen Foods, Ocean Select Seafood, Sea Pearl Seafood	Shrimp
\$23,798,170	Trident, Ocean Beauty	Salmon, pollock
\$15,970,170	Trident, High Liner	Pollock
\$12,369,942	OBI Seafoods, Peter Pan, Trident	Salmon
\$9,353,320	America's Catch, Consolidated Catfish Companies, Heartland Catfish	Catfish
\$5,469,340	America's Catch, Heartland Catfish	Catfish
\$4,425,480	Blue Harvest Fisheries	Pollock, haddock, perch
\$4,197,480	America's Catch, Heartland Catfish, Simmons Farm Raised	Catfish
\$4,048,371	Channel Fish, High Liner	Pollock
\$3,938,400	Consolidated Catfish Companies	Catfish
\$2,272,089	Trident	Pollock
\$2,142,440	America's Catch, Consolidated Catfish Companies	Catfish
\$2,121,418	Trident, Channel Fish	Pollock
\$1,667,060	America's Catch	Catfish
\$1,609,364	Trident, Channel Fish	Pollock
\$1,231,200	Consolidated Catfish Companies	Catfish

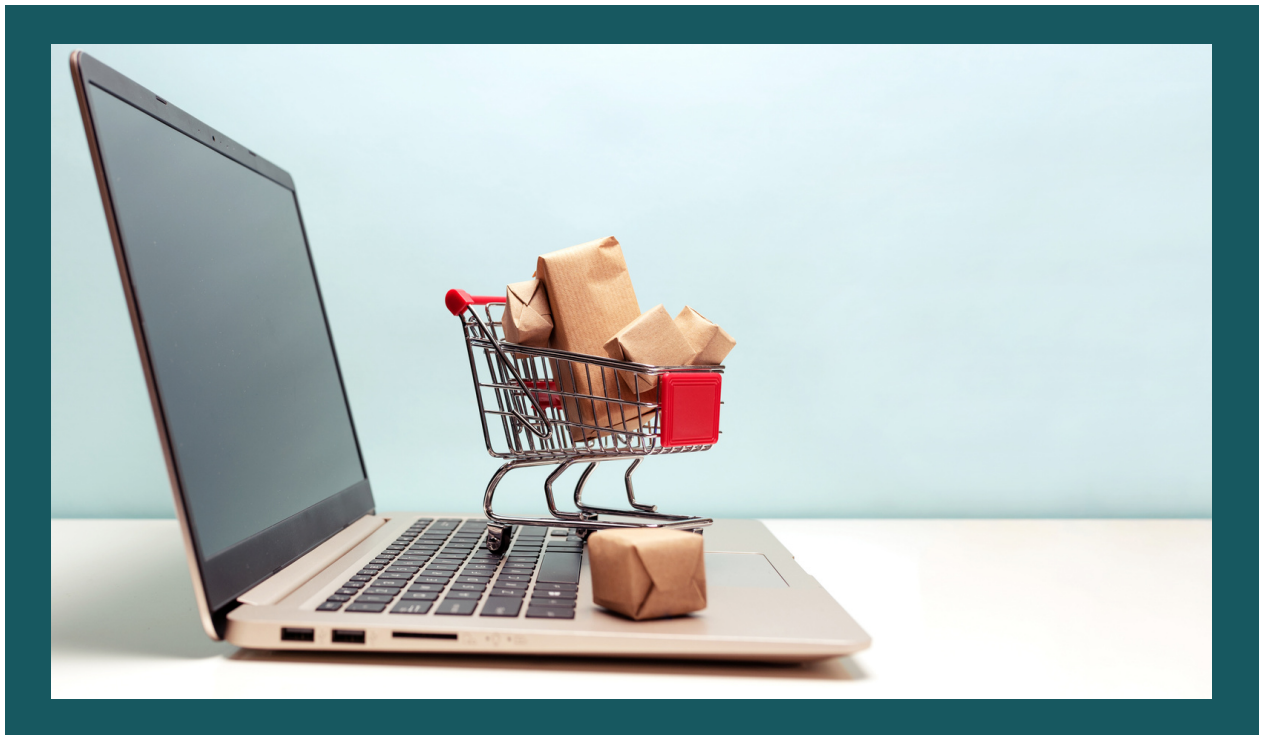
USDA, Intrafish

Recommendations for Participating in Government Purchasing

1. Review the requirements to become an approved vendor for the USDA and determine if bidding for federal government contracts is right for you.
2. If your state has a food purchasing program, explore how you can become an approved vendor.
3. During times of crisis, advocate for increased authority for sales to federal or state food purchasing programs to stabilize the local seafood market.

Conclusion

Increasing market diversity is crucial for the resilience of fishermen. During the pandemic, many fishermen turned to direct sales to reach customers who were interested in purchasing local, sustainable seafood. Building and maintaining an online presence was an important tool for marketing these direct sales – some fishermen turned to social media to advertise sales, or created profiles on local mobile applications and government websites so consumers could find them more easily. Other fishermen with larger capacities opened "shops" on online marketplaces, specifically those that cater to local, specialty suppliers. The success of CSFs during the pandemic indicates potential long-term growth of the model as more consumers become exposed to it. Opportunities for philanthropy and government purchasing of seafood are becoming more widespread and accessible for fisheries with strong administrative backbones. The initial shocks caused by COVID-19 were extreme, but the incredible resilience of fishermen during that time provides invaluable lessons for market diversification going forward.



Recommendations:

- Social media marketing - page 4
- Mobile applications - page 5
- Government marketing resources - page 6
- Using online grocery platforms - page 7
- CSFs - page 10
- Philanthropy - page 12
- Participating in government purchasing - page 13