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San Diego Fish Tales: Stories and Recipes from the Local Sustainable Seafood Community

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San Diego Fish Tales

Stories and Recipes from the Local Sustainable Seafood Community



Photo by Kevin Huang

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June 2020

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“This is not grocery store seafood.
This is seafood for the soul, caught in your backyard.”

Tanner Saraspe

Third Generation San Diego Fisherman

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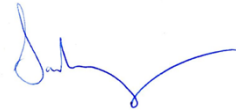
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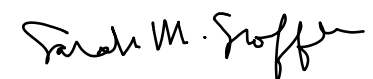
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Abstract

San Diego, California has a rich fishing history, but the once booming seafood industry is declining. Although much smaller now than at its peak, the commercial fishing industry is productive, accessible, and an asset to the community and local economy. Commercial fishermen, chefs, and others are involved in efforts to raise awareness about local seafood. Locally caught seafood accounts for only a small fraction of the seafood consumed in San Diego. San Diegans consume millions of pounds of seafood each year but about 90% is imported foreign seafood. Large amounts of US seafood, including catches from San Diego, are exported to foreign markets. Consumers have the power to shift the seafood marketplace when they buy local, sustainable seafood, which supports the environment, the economy, and the well-being of the community. There is a lack of San Diego-specific resources to bridge the gap between responsible seafood producers and seafood consumers. This capstone project is part of a larger endeavor to produce and publish an ocean-to-table book that highlights six sustainable seafood products caught by San Diego commercial fishermen. The seafood products include California spiny lobster, opah, rockfish, sablefish, spot prawn, and red urchin. Creative writing, storytelling, scientific facts, and recipes introduce the reader to the sustainably caught seafood products and the local seafood community, including commercial fishermen, fishmongers, seafood purveyors, and chefs. The aim is to increase consumer knowledge, appreciation, and consumption of locally caught, sustainable seafood.



Photo by Jake Stein



Photo by Fred Greaves

Background

San Diego, California has a storied fishing heritage and history. Once known as the “Tuna Capital of the World,” the tuna industry was San Diego’s third largest industry, employing over 40,000 people by the 1960s.¹ Presently, there are only about 130 commercial fishermen in San Diego County.²

San Diegans consumed an estimated 23 million pounds of seafood in 2018.³ Similar to most Americans, the seafood eaten by San Diegans is mostly tuna, salmon, and shrimp, and about 90% of it is imported from foreign countries.⁴ That means in 2018, San Diegans ate almost 21 million pounds of imported seafood and just over 2 million pounds of domestic seafood – and only a small fraction was locally harvested. Local seafood is not well represented in San Diego’s grocery stores and supermarkets. In 2015, only 8% of San Diego markets with fresh seafood counters “consistently carried San Diego-sourced seafood.”⁵ Add to that, a large percentage of the seafood landed in San Diego is exported. According to some local fishermen, only 20% of their catch is retained in San Diego.⁶

There is high demand for US seafood in international markets. Foreign countries bought more than 95% of California spiny lobster and 90% of market squid landed in San Diego prior to 2019.⁷ However, Chinese trade tariffs and the coronavirus pandemic substantially reduced seafood exports to primary foreign markets in 2019 and 2020.⁸

Due to deflated export markets, the harvest decreased in fisheries with low domestic demand and value.⁹ There was not a viable local market for species like California spiny lobster, which in general, is largely exported to China.¹⁰ Instead of accepting a low price per pound, lobster fishermen stopped harvesting lobster – production in March 2020 was less than half of the production in March 2019.¹¹

¹ Ellis (2008, p. 217).

² Leschin-Hoar (2014).

³ National Marine Fisheries Service (2020, Per capita consumption).

⁴ Ibid, Imports.

⁵ Talley, Warde, & Venuti (2016).

⁶ Shoffler (2016).

⁷ Ibid; Masury & Tripp (2016).

⁸ Ess (2020).

⁹ Ibid.

¹⁰ Ibid.

¹¹ Ibid.

San Diegans are accustomed to eating Maine lobsters, even though California spiny lobsters are a local species. San Diego researchers Theresa Talley, Ph.D. and Adina Batnitzky, Ph.D. commented that, “[t]he very narrow San Diego seafood diet – compounded by prevalent, inexpensive imports of mainstream species – results in an egregious lack of awareness of the species landed locally.”¹² When it comes to seafood, most consumers lack “dietary adventurousness.”¹³

Consumers are more likely to try new foods from trusted producers who provide information about sourcing and preparation.¹⁴ Commercial fishermen, chefs, and others from San Diego’s seafood community are involved in efforts to raise awareness about local seafood products and revitalize the industry.¹⁵ Fishermen connect with consumers through the fishermen’s market, community events, and outreach. Chefs buy seafood for their restaurants directly from local fishermen, which may increase consumer access to fresh, local seafood.¹⁶ Restaurant chefs are trusted by customers to select and prepare seafood.¹⁷ This trust provides chefs an opportunity to introduce consumers to new types of seafood. Consequently, chefs play an important role in increasing demand for local, sustainable seafood.

Consumer demand influences the seafood marketplace. Buying locally caught, responsibly sourced seafood positively impacts future sustainability because local, sustainable products support the environment, the economy, and the well-being of the community.¹⁸ The goals of this project are to bridge the gap between sustainable seafood producers and seafood consumers in San Diego and encourage consumers to use their purchasing power responsibly.

¹² Talley & Batnitzky (2014).

¹³ Talley, et.al. (2016).

¹⁴ Zepeda & Deal (2009).

¹⁵ Talley, et.al. (2016).

¹⁶ Soto (2018).

¹⁷ McLynn (2017).

¹⁸ Brain (2012); Monterey Bay Aquarium Seafood Watch (2020).

Project Introduction

The term *ocean-to-table* refers to a social movement that promotes seafood traceability and transparency in the supply chain – essentially, knowing where your seafood comes from. The movement encourages buying local, minimally processed seafood directly from the fisherman who caught it, when possible. Its success depends on consumers changing their behavior. This requires creativity, perseverance, and access to consumers. The seafood community needs allies who share its goals, support its work, and bring new ideas to the table.

This project addresses consumer knowledge gaps and the lack of San Diego-specific resources that connect sustainable seafood producers with consumers. The majority of San Diegans are unfamiliar with local seafood products.¹⁹ Many people are unaware of the benefits of buying local, sustainable seafood.²⁰ Most seafood consumers do not know much about US fisheries management strategies and local fishing practices. The US is a global leader in responsible fisheries management and, in general, buying local seafood supports sustainable fisheries.²¹ Education and exposure build familiarity with local seafood, increase understanding of San Diego’s fisheries, and generate interest in local, sustainable seafood.

More specifically, this project explores the concepts and benefits of local seafood, sustainable seafood, and fresh seafood. Through storytelling, the narratives introduce the reader to San Diego fishermen, a fishmonger, and a seafood purveyor. Scientific facts and recipes highlight six sustainable seafood products caught by local fishermen. Finally, the writing illustrates the impact of seafood on San Diego’s economy.

These narratives are part of a larger plan to produce and publish an ocean-to-table book specific to San Diego. The goals of the book are to increase consumer knowledge and awareness of local, sustainable seafood, foster appreciation for San Diego’s seafood industry, and encourage San Diegans to eat local, sustainable seafood.

¹⁹ Talley, et.al. (2016).

²⁰ California Sea Grant (2018).

²¹ Melnychuk, Peterson, Elliott, & Hilborn (2017).

Problems & Justifications

Problem 1: Consumers are disconnected from the local seafood industry and lack knowledge, awareness, and appreciation of local, sustainable seafood products.

- **Counterpoint 1:** San Diego has a productive and accessible seafood community eager to connect with consumers, raise awareness about local products, and revitalize the industry.
 - **Solution 1: CONNECT:** Connect producers and chefs with seafood consumers to bridge knowledge, awareness, and appreciation gaps, and generate interest in local, sustainable seafood.

Problem 2: San Diegans are unfamiliar with many local seafood species and lack “dietary adventurousness” when it comes to seafood.

- **Counterpoint 2:** Consumers may try new types of seafood from trusted producers and chefs who provide information about sourcing and preparation, and restaurants may increase access to fresh, local seafood.
 - **Solution 2: BUILD TRUST:** Develop relationships and build trust among producers, chefs, and consumers by sharing recipes for preparing seafood, and increase familiarity with local seafood species.

Problem 3: San Diegans, like most Americans, eat mostly imported seafood and prefer only a few seafood species – generally, salmon, shrimp, and tuna.

- **Counterpoint 3:** San Diegans consume millions of pounds of seafood each year and spend millions of dollars buying seafood.
 - **Solution 3: CHANGE CONSUMER BEHAVIOR:** Responsible seafood choices paired with consumer purchasing power support environmentally friendly fisheries and drive the seafood marketplace toward sustainable products. Also, adventurous consumers can use their purchasing power to demand more seafood variety.

This project tackles the first step in each of the three solutions. First, education and exposure connect consumers with local, sustainable seafood products and producers. Second, personal stories and recipes build shared understanding and trust. Third, consistent messaging and encouragement to eat local, sustainable seafood help consumers make responsible seafood choices and may lead to long-term behavioral change.

Project Objectives

Obtain Certificate of Exemption from Internal Review Board to certify project as exempt.

- Complete the UC San Diego Human Research Protections Program Exempt Research Application and associated forms.
- Create the Verbal Consent Script and Authorization and Release Form.
- Write interview questions.

Learn about San Diego's fisheries and sustainable seafood species.

- Research fisheries and sustainable seafood species in San Diego.
- Select the species to feature.

Develop and cultivate relationships with San Diego's seafood community.

- Recruit members of San Diego's sustainable seafood community to participate, including fishermen, a fishmonger, a seafood purveyor, and chefs.
- Interview San Diego fishermen, fishmonger, and seafood purveyor about their role and experience in San Diego's seafood industry, the definition and benefits of local, sustainable seafood, and the most important things readers should know about their job and the seafood industry.
- Interview chefs about their work and the importance of local, sustainable seafood.
- Solicit recipes with one or more of the featured local, sustainable seafood products from San Diego chefs, fishermen, fishmonger, and seafood purveyor.
- Collect and compile recipes.

Write narratives as the framework for an ocean-to-table book specific to San Diego.

- Through creative writing, explain the concepts and benefits of local seafood, sustainable seafood, and fresh seafood as well as the impacts of seafood on San Diego's economy.
- Through storytelling, introduce San Diego fishermen, fishmonger, and seafood purveyor.
- Through recipes, introduce San Diego chefs.
- Through creative writing, scientific discussion, and recipes, highlight six sustainable seafood products caught by San Diego fishermen.

Project Design & Execution

Seafood Products

The seafood species selected for this project include California spiny lobster, opah, rockfish, sablefish, spot prawn, and red urchin. First, I prioritized species based on their sustainability rating from the Monterey Bay Aquarium’s Seafood Watch program. Only those that were rated “Best Choices” or “Good Alternatives” were eligible. Next, I considered the importance of the species in San Diego’s fisheries versus other fisheries of the West Coast. Species that were somewhat or highly specific to Southern California stayed on the list. Finally, I chose underrepresented, underutilized, and unfamiliar species. For the remaining species, I compared the percentage sold in San Diego (the market share) to the percentage of total landings in San Diego. Species that had low market share to landing ratios were included. Tuna species were excluded because they are well represented in San Diego’s seafood market. Overall, my goal was to select sustainable, regionally important, and underrepresented, underutilized, or unfamiliar species.

After selecting the species for the project, I conducted in-depth research on them. I collected data on sustainability ratings, sustainable aspects of the fisheries, areas of concern, species’ roles in the ecosystem, population status, harvest seasons, biological and life history characteristics, physical characteristics, and interesting facts. Additionally, I researched culinary uses, cuts of meat, tastes, textures, and underutilized parts. This research supports the seafood product narratives, which are all in progress and will be completed for the book.



Photo by Kevin Huang

Participants

The success of this project relied on the participation of San Diego's seafood community. After securing a Certificate of Exemption from UC San Diego's Internal Review Board, I recruited participants. On several occasions, I spoke with fishermen and their families at San Diego's Tuna Harbor Dockside Market, a fish market owned and operated by commercial fishermen. I volunteered at the market's popup restaurant, Loaf & Fish, to get a sense of the business. When participants could not meet at the market, I reached out through email and phone calls. Persistence, patience, and cold calls to public relations and marketing agents paid off. In all, twenty-three people agreed to participate.

I interviewed six members of the seafood community, including four commercial fishermen, one fishmonger, and one seafood purveyor. Each interview lasted about an hour to an hour and a half. The interviews provided content and influenced the themes of the short stories. I used quotes in the narratives to add authenticity and share individual perspectives and personalities. Seven chefs provided recipes for the project. The remaining chefs plan to submit recipes in the near future.



Photo by Kevin Huang

COVID-19

This ten-week project was conducted during the coronavirus pandemic and stay at home orders. This was an incredibly difficult, challenging, and trying time for all participants. Some fishermen quickly adapted their businesses launching online ordering and contactless home deliveries or curbside pickups. Other fishermen stayed home due to health concerns or lack of business due to restaurant closures. Many restaurants closed. Some restaurants remained open and operated with extremely limited staff. In most cases, the chef and one or two employees ran the business six to seven days a week. The owner of Catalina Offshore Products, Dave Rudie told me, “I’ve been through storms in the ocean where my boat almost flipped over. But this is the biggest storm I’ve ever been through.” Catalina Offshore Products lost 70% of business when restaurants closed. Despite all the emotions, exhaustion, and uncertainty, every participant was exceptionally generous with her or his time.



Photos by Kevin Huang

Next Steps

Looking forward, my goals are to revise the narratives and stories, complete the species' science sections, and collect and test all of the recipes. Once the writing is done, I will need a photographer and graphic designer. Photos and design will be incorporated into the layout. Of course, the book will need an eye-catching cover and a thorough copy edit. Then, it will be ready to publish and time to distribute the book.



Photo courtesy of Tanner Saraspe

Discussion

The impacts of the coronavirus pandemic on San Diego's seafood industry demonstrate the interconnectedness of local seafood businesses, the influence of foreign countries, and the importance of the seafood consumer. When restaurants closed, fishermen and seafood purveyors lost some of their best customers. When foreign borders closed, fishermen and wholesalers lost many high value export markets. When local consumers were not interested in buying local seafood they had never tried before, some fishermen stopped fishing. Right now, fishermen are out of work, others are unable to sell their catches, wholesalers have freezers full of fish and no buyers. These examples illustrate the economic consequences of a downturned fishing industry, but they overlook the impacts of fishing on the environment and community well-being.

If there is one theme that has emerged from this project, it's connection. The connection between commercial fishermen and seafood consumers. The connection between seafood chefs and customers. The connection of local, sustainable seafood to the environment, the economy, and the community. The connection between sustainable seafood and a sustainable fishing industry. The list goes on. And when one factor is out of balance it affects the others.

Moving beyond the pandemic, San Diego consumers are out of touch with local seafood and San Diego's seafood industry. This means that San Diego seafood is exported, then more must be imported to meet the demand. But San Diego consumers have an opportunity to rebalance these trades. This will take work on the part of the consumer. We need to learn more about local seafood, practice dietary adventurousness, and try new seafood products. We will have to put ourselves out there and ask questions like, "Where does this seafood come from?" "How did it get here?" "Who caught it?" "Is it sustainable?" Asking these questions might feel awkward or rude. But it is not rude at all. As a consumer, you have the right to know where your food comes from, but it is up to you to exercise that right. If you are willing to eat whatever, you will be served whatever. But, if you consistently choose local, sustainable seafood, those around may follow suit. We cannot change San Diego's seafood market overnight. But with time and persistence, small changes have the power to make a big difference.

This project is about taking the first step and trying something new. It is about empowering consumers with knowledge, instilling appreciation. And, it is about connecting. We are all in this together.

Conclusion

With great power comes great responsibility. Seafood consumers should remember this proverb. Our purchases send a powerful message to producers. Buying local, sustainable seafood supports environmentally friendly fisheries, San Diego's economy, and the well-being of our community. We have the power to influence the seafood marketplace and make a positive difference. Our responsibility is to be knowledgeable, aware, and appreciative of local, sustainable seafood. In the end, sustainability is about the future. Our seafood choices today impact our fisheries for generations to come. Eat responsibly.



Photo by Kevin Huang

Acknowledgements

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