

Galvanizing and Professionalizing a New Generation of Commercial Fishermen: A Review of Young Fishermen Training Programs in North America Report for National Fish and Wildlife Foundation Grant No: 65972 Submitted March 31, 2021

Commercial fishing is a vital part of the Gulf of Mexico (Gulf) coastal economy. This region is second only to Alaska in commercial landings. In 2018, 1.3 billion pounds of fish and shellfish worth \$800.8 million were caught by commercial fishermen in the five Gulf States.¹ It is integral to the culture of the region. One of the many challenges facing commercial fishermen, fisheries, and fishing communities in the Gulf is an aging fleet with few younger entrants. This trend is often referred to as "the graying of the fleet," and it is an issue that is not unique to the Gulf.

There is ample evidence of the "graying of the fleet" throughout the nation and its fisheries. In the Gulf specifically, this problem is prevalent across fishery types, (e.g. shrimp, reef fish) and is applicable to both inshore and offshore fisheries. Concurrent with and impacted by the aging problem, the overall number of fishery participants is dramatically decreasing.

Smaller fishery-dependent communities that still exist across the Gulf, including but not limited to Palacios, TX, Venice, LA, Apalachicola, FL, or Cortez, FL,^{2,3,4} are particularly vulnerable as the fishing fleet continues to age and decline. In Louisiana, for example, there was a 53% reduction in the number of fishermen landing shrimp and a median age increase of ten years (from 41 to 51) between 2000 and 2015.⁵ For blue crabbers, which is exclusively an inshore fishery, a similar trend was detected over the same time period: the number of fishermen decreased almost 32% while the median age increased from

¹ National Oceanic and Atmospheric Administration (NOAA). <u>Commercial Landings</u>.

² Peterson, J.S., Glazier, E.W., Stanley, L., Jepson, N., Stevens, J.M., Southerly, K.W. 2005. <u>Identifying Communities</u> <u>Associated with the Fishing Industry in Texas</u>.

³ Peterson, J.S., Glazier, E.W., Stanley, L., Southerly, K.W., Stevens, J.M., Gramling, R., Forsyth, C., Woodell, G., Mortell, L., Halls, N. 2005. <u>Identifying Communities Associated with the Fishing Industry in Louisiana</u>.

⁴ Peterson, J.S., Glazier, E.W., Stanley, L., Jepson, N., Southerly, K.W., Stevens, J.M. 2005. <u>Identifying Communities</u> <u>Associated with the Fishing Industry in Florida.</u>

⁵ Bourgeois M., Landry, L., Lightner, J., Marx, J., Semon, K. Updated July 2015. <u>Louisiana Shrimp Fishery</u> <u>Management Plan</u>. Louisiana Department of Wildlife and Fisheries.

40 to 49.⁶The number of commercial reef fish fishermen decreased 63% during that same time period while their median age increased from 43 to 49 years old.⁷

Florida data also exhibit a shift to an older fishing fleet. From 1991 to 2017, the median age of offshore commercial fishermen increased from 44 to 52. When weighted by the number of trips taken the median age increased from 46 to 55.⁸ Not only are there fewer younger fishermen, but the older fishermen are fishing harder and taking more trips.

From a Gulf-wide perspective, 2017 data show that only one third of fishermen are under 45 years old and almost 40% are over 55 years old.⁹ Similarly, numerous studies have shown a decline in average age for fishermen on both the East and West coasts of the United States as well as in Alaska.^{10,11}

In response to the "graying of the fleet" phenomenon, commercial fishing groups, non-governmental organizations, and other collaborations have developed to address this issue directly. The Co-Principal Investigators (Co-PIs) of this project saw the need to recruit young, professional individuals into Gulf fisheries to replace the fishermen that are facing retirement. In order to develop a program that was effective and impactful, we looked to examples of other fishermen training programs to assess their goals, target audiences, training formats, and funding sources. This paper serves as a review of those programs, based on both publicly available information and interviews and webinars with the coordinators.

Alaska Marine Conservation Council – Alaska Fishermen's Network

Alaska Marine Conservation Council (AMCC) is a non-profit organization based in Anchorage, Alaska. Their mission is "to protect and promote the integrity of Alaska's marine ecosystems and the health of ocean-dependent communities."¹² The Alaska Fishermen's Network (AKFN) is a program of AMCC that was developed to connect young fishermen to each other and to resources for commercial fishermen.¹³ The AKFN website is an exhaustive source of resources, including regulations and the regulatory process, permitting, acquiring quota, fishery loan resources, marketing product, the scientific process in fisheries,

⁹ Posadas, B., 2018, 18 January. <u>Know more about the commercial fishermen in the Gulf of Mexico</u>.

¹² AMCC. <u>Our Story</u>.

⁶ Vanderkooy, S. J., and Perry, H.M. (Eds). 2015. <u>The Blue Crab Fishery of the Gulf of Mexico, United States: A</u> <u>Regional Management Plan</u>.

⁷ LDWF. Based on trip ticket and commercial license files data through 2015/2016

⁸ Florida Fish and Wildlife Conservation Commission. (2018). 1986-2017 Commercial Fishery Landings Data through Batch 1394, extracted October 4, 2018. Marine Fisheries Information System. St. Petersburg, FL.

¹⁰ Russell, S.M., Sparks, K., Arias-Arthur, A., Varney, A. (2014). The Pacific Groundfish Fishery Social Study: An Initial Theme Based Report.

¹¹ Andreatta, S., & Parlier, A. (2010). The Political Ecology of Small-Scale Commercial Fishermen in Carteret County, North Carolina. Human Organization, 69(2).

¹³ Personal communication (pers. comm.). Jamie O'Connor, Working Waterfronts Director, AMCC. 10.31.2019 webinar with Gulf Young Fishermen Program (GYFP) Planning Team (PT).

and training opportunities.¹⁴ While AKFN does not take political positions, it does focus on empowering young fishermen and coaching them through the regulatory process and how to get involved.^{15,16} The AKFN also runs a Young Fishing Fellows program.¹⁷ AKFN selects 3-5 fellows per year and matches them with industry businesses and organizations to conduct special and focused projects. AMCC provides the funding for stipends for the fellows, and occasionally the organization hosting the fellow will contribute matching funds.¹⁸ This fellowship has served as a springboard for many young fishermen that have participated, with some working in Washington D.C. for periods of time or becoming fixtures at the North Pacific Fishery Management Council.¹⁹

Alaska Longline Fishermen's Association – Crew Training Program

Alaska Longline Fishermen's Association (ALFA) represents longline fishermen in the Alaska halibut, sablefish, and rockfish fisheries and is based in Sitka, Alaska. They list several programs under their "Young Fishermen Initiatives," including work on the Young Fishermen's Development Act, a Fishery Conservation Network that facilitates research between commercial fishermen and scientists, and a deckhand apprenticeship program.²⁰

ALFA launched the Crew Training Program in 2017 with three goals: 1) prepare the next generation of commercial fishermen for success 2) provide real-world experience to potential deckhands 3) instill an appreciation for commercial fishing to those who may not otherwise understand the intricacies of the industry (in other words, create seafood ambassadors).²¹

ALFA advertises when applications are open on social media and in some industry publications such as National Fisherman.²² After an initial screening of process, ALFA matches applicants with captains who have volunteered to take participants in the Crew Training Program. Ultimately, it is up to these captains to select who they will take on their vessel. Participants are responsible for their travel to Sitka, but once on a boat they are paid as crew. According to Linda Behnken, Executive Director of ALFA, this is one of the aspects of the program that has made it so successful. The skippers value the apprentices as a crew, and there is potential for the apprentices' pay to increase as they improve and demonstrate their value on the vessel. Through the apprenticeship program, captains get help finding people interested in working on a commercial fishing vessel. ALFA does offer host skippers insurance stipends and some materials for the apprentices, such as survival suits. ALFA is also on call to provide in-season support to

- ¹⁷ AKFN. <u>Young Fishing Fellows</u>.
- ¹⁸ Pers. Comm. Jamie O'Connor, 10.31.2019.

¹⁴ AKFN. <u>Resources</u>.

¹⁵ Pers. Comm. Jamie O'Connor, 10.31.2019.

¹⁶ AKFN. <u>Resources</u>.

¹⁹ Pers. Comm. Jamie O'Connor, 10.31.2019.

²⁰ ALFA. <u>Young Fishermen Initiatives</u>.

²¹ Pers. Comm. Linda Behnken, Executive Director of ALFA, 1.21.2020.

²² Welch, L. February 7, 2019. <u>Alaska deckhand apprenticeship program open for applicants</u>. National Fisherman.

both captains and apprentices in case issues arise. ALFA conducts exit interviews and program assessments each year with participants and skippers to shape how the program needs to evolve in future years.²³

Commercial Fisheries Center of Rhode Island - Commercial Fisherman Apprenticeship Program

The Rhode Island Commercial Fisherman Apprenticeship Program (CFAP) started due to a concern from the Rhode Island Commercial Fishing Industry regarding a shortage of good, qualified crew members.²⁴ Some captains were hesitant to take people who were inexperienced out fishing, and concurrently, young people walking the docks looking for jobs did not know the best first step to getting on a vessel.²⁵ To address these issues Rhode Island Commercial Fisheries Center partnered with Rhode Island University and collaborated with local industry to develop a training program.

The training program lasts four weeks and is both classroom and field based. The majority of the training is spent in the classroom where students learn safety, navigation, basic vessel maintenance, gear maintenance and net sewing, the role of science in fisheries, and the role of law enforcement.²⁶ Students get about two days on a vessel and they have some selection on the kind of fishing vessel they go on (lobster boat, scallop dredge, trawler).²⁷

The program offers a stipend to students for completion and essential gear to get them started (boots, knives, gloves,). They also compensate the captains who come into train students and take them on vessels, both in the form of per diem stipends and covering insurance for the vessels.²⁸

Recruitment occurs through high school career day and online job sites, also through veteran job placement services. They have had good success with veterans. Thus far, no high schoolers have come through the program, and most participants are between 24 and 32 years old.²⁹ The program drug screens and background checks all participants and is very strict about students being drug free and punctual.³⁰ There is approximately a 50% retention rate for graduates into the field, meaning about half that complete the training actually get a job on board a vessel.

California Sea Grant – California Commercial Fishing Apprenticeship Program

The California Commercial Fishing Apprenticeship Program launched in 2020 and is overseen by California Sea Grant. This program is a combination of classroom and on-the-water training with

²³ Pers. comm. Linda Behnken. 1.21.2020

²⁴ Gravelle, K. June 2, 2018. <u>Apprenticeship teaches the ins and outs of fishing</u>. The Narragansett Times.

²⁵ Pers. Comm. Fred Mattera, Executive Director of Commercial Fisheries Center of Rhode Island. 11.12.2019

²⁶ Commercial Fisheries Center of Rhode Island. <u>Apprenticeship</u>.

²⁷ Pers. Comm. Fred Mattera. 11.12.2019.

²⁸ Pers. Comm. Fred Mattera. 11.12.2019.

²⁹ Pers. Comm. Fred Mattera. 11.12.2019.

³⁰ Pers. Comm. Fred Mattera. 11.12.2019.

commercial fishermen. Participants are told that estimated costs to participate are between \$500 and \$1000, though there are scholarships available. Once working with their sponsor, they are an earning member of the crew. The workshop is approximately 100 hours and graduates will have several certifications upon completion, including first aid, CPR and AED use, AMSEA Drill Conductor Training, and a California Boater Card.³¹

The Apprenticeship lasts 6-12 months, and participants must find a captain that is willing to sponsor them for 1,000 hours of on-the-job training.³²

Cape Cod Commercial Fishermen's Alliance- Fishermen Training Program

The Cape Cod Commercial Fishermen's Alliance (CCFA) launched their fishermen training program in 2020. It is a five-day program in which students learn the basics of commercial fishing, including species identification, knot tying, first aid, and types of gear used in the region.³³ The program was advertised through social media, local radio, and in tackle shops. The first session was held in January 2020 and had five participants. Several more sessions were planned for this year, but due to COVID-19 they had to be postponed.³⁴ Training was focused mainly in the classroom, with some time devoted to walking the docks and viewing vessels. Due to insurance limitations, there was no official at-sea training portion of the program.³⁵ CCCFA connected participants in the training program with local captains, and the onus was on them to find jobs within the fleet. As of November 2020, three graduates were working on commercial vessels.

British Columbia Young Fishermen's Network

The "graying of the fleet" is not unique to the United States. Canadian fisheries are also experiencing a shortage of young entrants into commercial fishing. In 2016, 23% of the commercial fishermen in British Columbia were under 30.³⁶ The British Columbia Young Fishermen's Network (BCYFN) is a program supported by the TBuck Suzuki Environmental Foundation. They function as a "supportive space for the next generation of B.C.'s fishing fleet" and "foster learning and networking among young fish harvesters by creating connections to the people and resources they need to succeed."³⁷

The BCYFN is not a training program in the way that ALFA or Rhode Island's programs are. Instead, it is more similar to AMCC in that it is a central location of resources for young fishermen to get educated on fisheries management, business development, and boat upkeep.³⁸ They also organize meetups so that

³¹ California Sea Grant. <u>California Commercial Fishing Apprenticeship Program Information</u>.

³² California Sea Grant. <u>California Commercial Fishing Apprenticeship Program Information</u>.

³³ CCCFA. <u>Fishermen Training Program</u>.

³⁴ Pers. comm. George Maynard, Policy and Research Coordinator, and Stephanie Sykes, Program and Outreach Coordinator for CCCFA. 11.19.2020.

³⁵ Pers. Comm. George Maynard and Stephanie Sykes. 11.19.2020.

³⁶ BCYFN. 2020 BC Young Fishermen's Gathering. Event Summary Report.

³⁷ BCYFN. <u>Home</u>.

³⁸ BCYFN. <u>Resources</u>.

fishermen can meet each other, and host an annual gathering. The annual gathering started in 2016 and is a two-day workshop that provides an opportunity for participants to make connections with mentors and other young fishermen.³⁹ In 2020, the annual gathering had 100 participants from 15 fisheries across British Columbia. Presentations included seafood marketing opportunities, fisheries management 101, marine safety, gear maintenance, and business planning.⁴⁰

Funding Young Fishermen Programs

In the instances where the Co-PIs interviewed program coordinators, they were always asked about funding. It is evident that acquiring long-term funding for young fishermen training initiatives is a challenge that most of these programs face and will have to overcome to ensure their sustainability. In almost every instance, a grant was the initial source for the development and initiation of a training program. From there, additional funds had to be acquired from local institutions. In the case of Rhode Island, after demonstrating success, they are now funded by Real Jobs Rhode Island.^{41,42} Real Jobs Rhode Island is a program of the Department of Labor and Training, growing "business-led partnerships that build workforce solutions."⁴³ CCCFA was able to have their program included in the Massachusetts state budget.⁴⁴ BKYFN has foundational support from the TBuck Suzuki Environmental Foundation. ALFA and AMCC are currently solely reliant on external grants.⁴⁵ Some of these groups have joined together to develop and advocate for funding that would support these programs on a long-term national basis. Legislation known as the "Young Fishermen's Development Act" was introduced in both 2017 (H.R. 2079/S.1323)^{46,47} and 2019 (H.R. 1240/S. 496).^{48,49} It was modeled after a successful Department of Agriculture program doing the same for farmers.⁵⁰ But the timeline of Congress and the array of other national priorities has forced groups to seek funding elsewhere in the short term and develop training programs to address the needs of their fisheries and regions. For these programs to continue, and for other programs to emerge and succeed in perpetuating commercial fishing, long-term funding solutions must be a priority for industry organizations, foundations, and Congress.

Conclusion

³⁹ BCYFN. <u>Annual Gathering</u>.

⁴⁰ BCYFN. 2020 BC Young Fishermen's Gathering. Event Summary Report.

⁴¹ Commercial Fisheries Center of Rhode Island. <u>Apprenticeship</u>.

⁴² Pers. comm. Fred Mattera. 11.12.2019

⁴³ Rhode Island Department of Labor and Training. <u>Real Jobs Rhode Island</u>.

⁴⁴ Pers. Comm. George Maynard and Stephanie Sykes. 11.19.2020.

⁴⁵ Pers. comm. Jamie O'Connor 10.31.2020 and Linda Behnken 1.21.2020.

⁴⁶ H.R. 2079. Young Fishermen's Development Act of 2017.

⁴⁷ S. 1323. Young Fishermen's Development Act of 2017.

⁴⁸ H.R. 1240. Young Fishermen's Development Act.

⁴⁹ S. 496. <u>Young Fishermen's Development Act</u>.

⁵⁰ United States Department of Agriculture. National Institute of Food and Agriculture. Beginning Farmer and Rancher Development Program.

Aging commercial fishing fleets is a pervasive problem across North America. Without an influx of young, dedicated individuals, this industry faces a threat of being greatly diminished. This would result not only in a cultural loss but would make domestic seafood even harder to acquire than it is now. Programs on multiple coasts have proven there is still interest in commercial fishing, and that with the right training and professionalization modules, they can produce individuals with an understanding of the work, business acumen, and knowledge of the regulatory process into the industry. These programs, and more like them, are necessary to ensure that one of the oldest professions continues to thrive along our coasts.