

Development of a Florida Seafood Program Using a Multi-Disciplinary Team

Abstract

The seafood industry in Florida is complex, with more than 80 varieties of Florida seafood commodities and an increasing number of imported products. This variety increases consumer confusion, especially with the growing concern about the origin, sustainability, and safety of seafood products. The objective of the Florida Seafood At Your Fingertips program is to provide Florida Extension agents with updated, science-based information regarding seafood, which will result in increased consumer awareness and consumption. Combining a survey instrument, curriculum modules, public displays, and a mobile application with the teaching expertise of Extension has allowed this program to reach consumers throughout Florida.

Holly Abeels

Florida Sea Grant
Extension Agent
Brevard County
Cocoa, Florida
habeels@ufl.edu

Bryan Fluech

Florida Sea Grant
Extension Agent
Collier County
Naples, Florida
fluech@ufl.edu

Lisa Krimsky

Florida Sea Grant
Extension Agent
Miami-Dade County
Miami, Florida
lkrimsky@ufl.edu

Brooke Saari

Florida Sea Grant
Extension Agent
Okaloosa and Walton
Counties
Crestview, Florida
bsaari@ufl.edu

Elizabeth Shephard

Family and Consumer
Sciences Extension
Agent
Brevard County
Cocoa, Florida
bshephar@ufl.edu

Kendra Zamojski

Family and Consumer
Sciences Extension
Agent
Leon County
Tallahassee, Florida
hughson@ufl.edu

University of Florida
IFAS Extension

Program Need

In 2012, commercial fishermen in Florida landed 93 million pounds of seafood valued at \$205.2 million (Florida Fish and Wildlife Conservation Commission, 2012). Florida is ranked 12th in the nation for seafood production, with more than 80 varieties of seafood commodities (National Oceanic and Atmospheric Administration, 2010). Florida's seafood industry has an economic impact of \$16.5 billion annually and employs approximately 82,000 people (National Marine Fisheries Service, 2014).

Despite this, lower-cost, imported seafood has displaced local seafood in many commercial markets. Ninety-one percent of the seafood consumed in the U.S. is imported (NOAA Fish Watch, 2014). Consumers are becoming more concerned about the origin, sustainability, and safety of seafood products. In addition, local food movements are encouraging people to buy locally.

The seafood industry is complex, and consumer confusion is prevalent. Available seafood information is often outdated, incorrect, conflicting, or not from a reputable source. Meanwhile, Americans are being told that they should incorporate more seafood into their diets.

Extension agents do not have the access, understanding, and/or ability to provide science-based seafood education to consumers and thus are apprehensive about the topic. Agents need vetted, research-based educational tools to help them address seafood-related subjects that concern consumers.

Introduction and Objectives

The Florida Seafood at Your Fingertips (FS@YF) program packages science-based information in an easy-to-use educational tool. The program was designed with input from Florida consumers through focus groups and a statewide survey. The project team that created this program is multi-disciplinary, allowing subject area expertise to give a "complete" picture of Florida seafood. The project team consists of UF/IFAS Sea Grant and Family and Consumer Sciences Extension agents, specialists, communications staff, and seafood industry representatives.

The program provides Florida Extension agents with updated, easy-to-access information regarding seafood, in order to increase consumer awareness of the variety, availability, and purchasing of Florida seafood and the health benefits of seafood consumption. Seafood Extension programming can be regionally tailored yet conducted statewide, in multiple discipline areas, allowing for an innovative program that will reach a wider audience (Braverman, Franz, & Rennekamp, 2012; Conway, Godwin, Cloughesy, & Nierenberg, 2003; Ishler et al., 2006).

The goals of the educational program are threefold: to help ease consumer concerns about and increase knowledge of seafood safety; to promote Florida's commercial seafood industry; and to provide current information to Extension agents for their use in delivering seafood education programs. Consumers who participate in the program will increase their knowledge of Florida seafood and will report behavior changes regarding seafood selection, handling, and consumption.

Florida Seafood at Your Fingertips

In order to appeal to a variety of consumers and outreach venues, an assortment of branded materials was created, including a curriculum guide, exhibit display, and mobile application. In addition, a report of the survey results was published for Extension agents to allow for regional tailoring of educational needs.

The FS@YF curriculum guide includes four PowerPoint modules, (1) Seasonality and Availability, (2) Purchasing and Handling Seafood, (3) Making Healthy Choices, and (4) Preparing Florida Seafood, with an outline of the objectives, notes to instructor, supporting materials, and evaluations for each module. The modules can be taught separately or in a series depending on the amount of time and objectives of the program. The curriculum guide also includes activities, press release, overall program evaluation, and a thumb drive with all the materials.

Five trifold tabletop displays were created to promote the FS@YF program at events throughout the

state. For use at these events, a bookmark with the program website and mobile application QR code was also created as a giveaway. Each bookmark can be personalized with the local Extension agent's contact information.

Last, the FS@YF mobile application (app) was developed for the general consumer to assist in purchasing and handling of seafood and to promote seafood consumption. Results reported in a Pew Research Center's Internet & American Life Project study found that 91% of adults own a mobile phone and 56% own a smartphone (Rainie, 2013). Creating an app was important in targeting those smartphone users because mobile technology is changing how people access and use information (Nielsen, 2014). The mobile app incorporates the content from the modules to create an easy-to-use and informative app.

Outcomes

The program has been marketed via the educational displays, newsletters, and social media throughout Florida. Approximately 3,500 people have seen the displays at events and locations around Florida. More than 250 people have seen a social media post or newsletter article promoting the program or app. To date, a total of 96 people have downloaded the app.

Since completion of the curriculum, one train-the-trainer workshop for Florida Extension agents and multiple local programs geared towards the general seafood consumer have been offered. Evaluations demonstrate knowledge gain, increase in confidence in purchasing and preparing seafood, and change in the amount of seafood consumed.

An additional benefit of FS@YF is it lends itself to partnering with local fish markets to deliver the program content. One county Extension FS@YF-trained provider consistently holds the program at a seafood market where participants learn about seafood from fishermen to consumer. Participants learn about the benefits of buying and eating a local product. Linking the program with a seafood market provides participants an opportunity to take immediate action with purchases in support of their local economy.

Summary

The FS@YF program is innovative and cutting edge due to the breadth of educational tools created. This model can be repeated for a variety of subjects and programs and can be regionally tailored. By working across disciplines and with outside industry, a strong and diverse program was developed that included buy-in from the community. Combining a survey instrument, educational modules, public displays, and the mobile app with the community teaching expertise of Extension has allowed this program to provide a wide-reaching Florida seafood promotion opportunity. Not only will Extension agents and seafood consumers benefit from this program, but the project team has gained a deeper knowledge and respect for each other's disciplines in Sea Grant, Family and Consumer Sciences, and the seafood industry. This has helped to promote multi-disciplinary programming around the state.

Acknowledgements

Additional members of the project team include Elaine Courtney, Bill Mahan, Dr. Chuck Adams, Dr.

Steve Otwell, Dorothy Zimmerman, Cinthia Sandoval, and Stacey Jones. Thanks to Vanessa Spero-Swingle and to the anonymous *JOE* reviewer for reviewing this article and providing feedback.

References

- Braverman, M. T., Franz, N. K., & Rennekamp, R. A. (2012). Extension's evolving alignment of programs serving families and youth: Organizational change and its implications. *Journal of Extension* [On-line], 50(6), Article 6FEA1. Available at: <http://www.joe.org/joe/2012december/a1.php>
- Conway, F. D. L., Godwin, D., Cloughesy, M., & Nierenberg, T. (2003). Watershed stewardship education program—A multidisciplinary Extension education program for Oregon's watershed councils. *Journal of Extension* [On-line], 41(4), Article 4FEA4. Available at: <http://www.joe.org/joe/2003august/a4.php>
- Florida Fish and Wildlife Conservation Commission. (2012). *Marine fisheries information system, 2012 annual landings summary, statewide*. Retrieved from: http://myfwc.com/media/2641818/sumstate_12.pdf
- Ishler, V., Dodd, A., Abdalla, C., Martin, G., Meinen, R. J., Mikesell, R. E., & Weld, J. L. (2006). Agricultural environmental programming in Pennsylvania: Increasing visibility and relevancy of Extension. *Journal of Extension* [On-line], 44(4), Article 4FEA7. Available at: <http://www.joe.org/joe/2006august/a7.php>
- National Marine Fisheries Service. (2014). *Fisheries economics of the United States, 2012*. U.S. Dept. Commerce, NOAA Tech. Memo. NMFS-F/SPO-137, 175p. Retrieved from: <https://www.st.nmfs.noaa.gov/st5/publication/index.html>
- National Oceanic and Atmospheric Administration. (2010). *NOAA's state of the coast report*. Retrieved from: http://stateofthecoast.noaa.gov/com_fishing/welcome.html
- Nielsen. (2014). *Nielsen's 2014 digital consumer report*. Retrieved from: <http://www.nielsen.com/us/en/reports/2014/the-us-digital-consumer-report.html>
- NOAA Fish Watch. (2014). *Farmed seafood—Outside the U.S.* Retrieved from: http://www.fishwatch.gov/farmed_seafood/outside_the_us.htm
- Rainie, L. (2013). *Pew Research Center's Internet & American life project, April 17-May 19, 2013 Tracking Survey*. Retrieved from: <http://www.pewresearch.org/fact-tank/2013/06/06/cell-phone-ownership-hits-91-of-adults>

Copyright © by Extension Journal, Inc. ISSN 1077-5315. Articles appearing in the Journal become the property of the Journal. Single copies of articles may be reproduced in electronic or print form for use in educational or training activities. Inclusion of articles in other publications, electronic sources, or systematic large-scale distribution may be done only with prior electronic or written permission of the *Journal Editorial Office*, joe-ed@joe.org.

If you have difficulties viewing or printing this page, please contact [JOE Technical Support](#)