

National Fish and Wildlife Foundation  
Fisheries Innovation Fund - 2015 - Submit Final Programmatic Report (New Metrics)  
Grantee Organization: Commercial Fisheries Research Foundation  
Project Title: Developing New Market Opportunities for Scup (*Stenotomus chrysops*), an Underutilized Species in the Northeast (RI)

**Project Period** 9/01/2015 - 8/31/2016

**Project Location** Rhode Island and Greater New England

**Description**

**(from Proposal)**

**Project**

**Summary (from**

**Proposal)**

Facilitate the market development of scup (*Stenotomus chrysops*), a locally underutilized species in New England. Project will compile baseline marketing information to determine new domestic and foreign market opportunities and evaluate the best consumer marketing approaches.

**Summary of**

**Accomplishments**

Throughout this project, the Commercial Fisheries Research Foundation (CFRF) explored and analyzed the factors essential to the development of local, regional, and national markets for scup (*Stenotomus chrysops*), an underutilized fish species in the northeast. Project activities included an analysis of annual and seasonal trends in the landings and price of scup, the capability of fishermen and seafood processors to harvest and produce scup fillets, the local (Rhode Island) demand for scup fillets in retail and institutional settings, as well as technical challenges that prevent scup fillets from being brought to market. In addition to these research activities, CFRF also organized a series of outreach events to provide local fishermen, seafood processors, culinary students, restaurant chefs, and seafood consumers with the opportunity to learn about, cook, and taste scup. These events engaged over 500 individuals, and bolstered a state initiative to increase the integration of scup and other underutilized seafood species in the local food system. Ultimately, CFRF shared project results, including actionable next steps for realizing the potential of the scup fishery and market, with state leaders, policy makers, and food system representatives.

This project successfully initiated the development of a local market for scup by increasing consumer, chef, and food institution awareness of the availability and versatility this seafood product. This research can be utilized by local seafood processors to evaluate risks and strategize their own business plans regarding scup processing. Developing a consistent demand for scup by large-scale food institutions, however, was unachievable during this project. This is in part due to the complexity of food procurement (i.e. vendor services, meal program managers) in institutional settings as well as the remaining technical issues preventing scup fillets from being available to the market (i.e. at-sea handling, freezing and refreshing techniques). Nonetheless, this work represents substantial progress towards opening markets for and increasing awareness of scup in Rhode Island.

**Lessons Learned**

Key lessons learned from this project include:

- 1) Food institutions, retailers, restaurants, and seafood consumers in Rhode Island are keenly interested in expanding their knowledge and use of scup and underutilized seafood species. Access to scup fillets, the preferred product type for food institutions, retailers, and consumers, however, is very limited.
- 2) Incorporating scup or other underutilized species into institutional and retail food systems requires commitments from large-scale food distributors, such as Sysco, as well as meal program managers, such as Compass Group.
- 3) Scup has to compete with low cost, imported seafood products, such as tilapia. Realizing a competitive wholesale price while also maintaining a stable and sufficient ex-vessel price presents a major challenge for incorporating scup in institutional food systems.
- 4) Fishermen would be willing to harvest more scup if minimum market prices were stable around \$0.50 per pound.
- 5) RI seafood processing companies remain reluctant to invest in scup fillet machinery and marketing campaigns, but out-of-state seafood processors have begun to express interest.
- 6) Insufficient wastewater capacity is a major factor that is preventing RI seafood processing companies from expanding their business to include scup processing.
- 7) In order to bring scup fillets to market, additional research is needed to determine the at-sea handling methods and shore-side freezing and refreshing techniques that produce a clean and palatable fillet in large quantities.
- 8) If scup fillets were consistently available at a price point between \$3.50 and \$4.50 per pound, approximately 15% of scup landed in Rhode Island could be utilized by local food institutions and

small-scale retailers. Further research is needed to investigate and develop regional and national markets for scup.

9) Re-branding scup as “sea bream” or “silver snapper” may help to encourage market growth.

## Activities and Outcomes

<b>Funding Strategy</b>	Capacity, Outreach, Incentives
Activity / Outcome	FIF - Outreach/ Education/ Technical Assistance - # people reached
Required	Recommended
Description	Enter the number of people reached by outreach, training, or technical assistance activities

# people reached - Current	519.00
# people reached - Grant Completion	519.00

Notes	The types of people reached include: 1) members of the commercial fishing industry based in the RI, including representatives of major processing companies and fishing vessel captains and crew; 2) students, professors, researchers in the fields of resource economics, marketing, and fisheries management; 3) fisheries managers in state/regional/federal agencies, commissions, and councils; 4) chefs, restaurant owners, seafood retailers, and seafood consumers in RI; 5) staff of environmental organizations working in the field of fisheries; 6) RI Sea Grant extension staff; and 7) interested members of the general public.
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Show Map Below

The following pages contain the uploaded documents, in the order shown below, as provided by the grantee:

Upload Type	File Name	Uploaded By	Uploaded Date
Final Report Narrative - Standard	FinalReportNarrative_CFRF_ScupMarketDevelopment_FINAL.pdf	Malek Mercer, Anna	11/27/2016
Photos - Jpeg	CFRF_DavesMarketScupTasting_AmberBaden.JPG	Malek Mercer, Anna	11/27/2016
Photos - Jpeg	CFRF_DavesMarketScupTasting_FillettDemo.JPG	Malek Mercer, Anna	11/27/2016
Photos - Jpeg	CFRF_DavesMarketScupTasting_ServingTacos.JPG	Malek Mercer, Anna	11/27/2016
Photos - Jpeg	CFRF_JWUclass_Demo_Anna_Mercer.JPG	Malek Mercer, Anna	11/27/2016
Photos - Jpeg	CFRF_JWUPortTour_Aaron_Fluke.JPG	Malek Mercer, Anna	11/27/2016
Photos - Jpeg	CFRF_JWUPortTour_Fred_Blackback.JPG	Malek Mercer, Anna	11/27/2016
Photos - Jpeg	CFRF_RISeafoodChefsTable_AllChefs&Dishes.JPG	Malek Mercer, Anna	11/27/2016
Photos - Jpeg	CFRF_RISeafoodChefsTable_DerekWagner_Scup.JPG	Malek Mercer, Anna	11/27/2016
Photos - Jpeg	CFRF_ScupCookoff_Prep.JPG	Malek Mercer, Anna	11/27/2016
Photos - Jpeg	CFRF_ScupCookoff_Spectators.JPG	Malek Mercer, Anna	11/27/2016
Other Documents	CFRF_PhotoCaptions.pdf	Malek Mercer, Anna	11/27/2016
Other Documents	CFRF_ScupFishermanQuestionnaire.pdf	Malek Mercer, Anna	11/27/2016
Other Documents	CFRF_ScupProcessingQuestionnaire.pdf	Malek Mercer, Anna	11/27/2016
Other Documents	CFRF_SeafoodProductRequirements_Questionnaire_CFRF.pdf	Malek Mercer, Anna	11/27/2016
Other Documents	CFRF_PhotoRecipe-CurryScup-web.pdf	Malek Mercer, Anna	11/27/2016
Other Documents	CFRF_PhotoRecipe-GrilledScupTacos-web.pdf	Malek Mercer, Anna	11/27/2016
Other Documents	CFRF_PhotoRecipe-ScupChiliLimeSauce-web.pdf	Malek Mercer, Anna	11/27/2016
Other Documents	CFRF_PhotoRecipe-ScupFishCakes-web.pdf	Malek Mercer, Anna	11/27/2016
Other Documents	CFRF_PhotoRecipe-SouthernFriedScup-web.pdf	Malek Mercer, Anna	11/27/2016
Other Documents	CFRF_RecipeCards_FriedSouthernScup&CurryWatermelonScup.pdf	Malek Mercer, Anna	11/27/2016

Other Documents	CFRF_RecipeCards_GrilledScupTacos &ScupCurry.pdf	Malek Mercer, Anna	11/27/2016
Other Documents	CFRF_RecipeCards_ScupFishCakes.pdf	Malek Mercer, Anna	11/27/2016
Other Documents	CFRF_Scup_Cookoff_Flyer.pdf	Malek Mercer, Anna	11/27/2016
Other Documents	CFRF_ScupCookoff_Rubric.pdf	Malek Mercer, Anna	11/27/2016
Other Documents	CFRF_RISeafoodSpeciesGuideForChefs.pdf	Malek Mercer, Anna	11/27/2016
Other Documents	CFRF_RISeafoodSpeciesReferenceTable.pdf	Malek Mercer, Anna	11/27/2016
Other Documents	CFRF_ScupInfoBrochure-web.pdf	Malek Mercer, Anna	11/27/2016
Other Documents	CFRF_SeaRobinAnyone_ChefsGetAcquaintedWithLocalSeafood_RhodeIslandPublicRadio.pdf	Malek Mercer, Anna	11/27/2016
Other Documents	CFRF_BringingTheOceanStateToYourPlate_JWU.pdf	Malek Mercer, Anna	11/27/2016
Other Documents	CFRF_ChefsTablePressRelease_JWU.pdf	Malek Mercer, Anna	11/27/2016

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# NFWF

## Final Programmatic Report Narrative

### 1. Summary of Accomplishments

*In four to five sentences, provide a brief summary of the project's key accomplishments and outcomes that were observed or measured.*

Throughout this project, the Commercial Fisheries Research Foundation (CFRF) explored and analyzed the factors essential to the development of local, regional, and national markets for scup (*Stenotomus chrysops*), an underutilized fish species in the northeast. Project activities included an analysis of annual and seasonal trends in the landings and price of scup, the capability of fishermen and seafood processors to harvest and produce scup fillets, the local (Rhode Island) demand for scup fillets in retail and institutional settings, as well as technical challenges that prevent scup fillets from being brought to market. In addition to these research activities, CFRF also organized a series of outreach events to provide local fishermen, seafood processors, culinary students, restaurant chefs, and seafood consumers with the opportunity to learn about, cook, and taste scup. These events engaged over 500 individuals, and bolstered a state initiative to increase the integration of scup and other underutilized seafood species in the local food system. Ultimately, CFRF shared project results, including actionable next steps for realizing the potential of the scup fishery and market, with state leaders, policy makers, and food system representatives.

### 2. Project Activities & Outcomes

#### Activities

- Describe and quantify (using the approved metrics referenced in your grant agreement) the primary activities conducted during this grant.
- Briefly explain discrepancies between the activities conducted during the grant and the activities agreed upon in your grant agreement.

The major goal of the project was to conduct baseline marketing research and information gathering to support the full use of scup, an underutilized species in the Southern New England and Mid-Atlantic regions. To achieve this goal, CFRF undertook the following activities: 1) Compilation and analysis of biological and fishery information for scup (i.e. landings, quota, market price, seasonality), 2) Development of marketing research questions for scup fishermen, seafood processors, and food institutions, 3) Implementation of interviews and meetings with fishing industry members and consumer groups to gather data regarding the potential supply and demand of scup within the state of Rhode Island, 4) Review of economic incentive options for the development of scup processing capabilities in Rhode Island, 5) Outreach to Johnson & Wales University culinary students, restaurant chefs, and local seafood consumers to increase awareness and utilization of scup and other underutilized seafood species via presentations, demonstrations, cooking competitions, fishing port tours, and public tasting events, 7) Compilation and analysis of results, including development of a scup fact sheet and scup recipe cards, and 8) Dissemination of project findings to the fishing industry, chefs, consumers, food institutions, policy makers, and other interested parties. Each of these activities is described and quantified below or in the following sections.

#### *Background Research:*

Initial baseline research focused on gathering basic biological and fishery information about scup, including:

- Scientific name: *Stenotomus chrysops*
- Common Names: Scup, Porgy
- Range: Between 2 and 130 meters depth from Cape Hattaras, North Carolina to Cape Cod, Massachusetts
- Size: 0.5 -1.5 lbs., but can grow up to 4 lbs. and 18" long
- Seasonal Habits: Spend winter along the mid/outer continental shelf and then migrate to inshore waters to spawn between May and August.
- Growth & Maturity: Fish become sexually mature at 2-3 years of age, and can live up to 13 years.
- Trophic Ecology: Bottom-feeding omnivore
- Stock Status: Not overfished and overfishing is not occurring. Stock declared rebuilt in 2009.
- Fishing Rate: Below recommended level
- Minimum Size/Age at Harvest: 9 inches/3 years

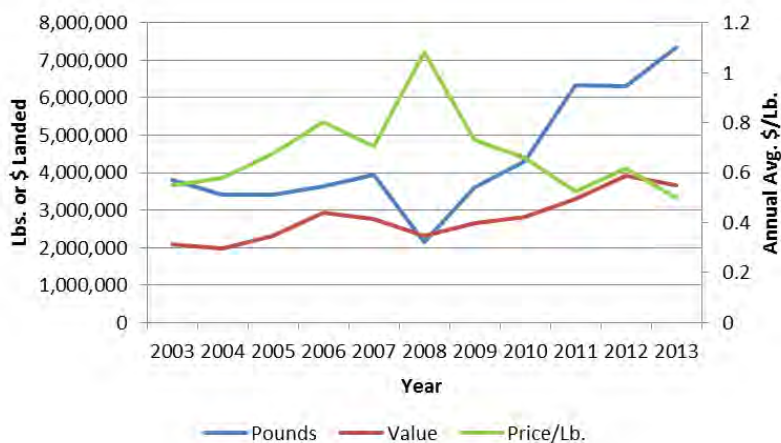
- Fishing Gear: Trawl, Fish pots, Fish traps, Rod & Reel
- Habitat Impacts: Minimal. Scup are typically harvested from sand and mud habitats, which are resilient to the effects of trawling and traps. Scup also inhabit rocky bottom, where they are mostly inaccessible to harvest.
- Bycatch: Minimal. Regulations are in place to minimize bycatch (mesh size, area closures)

CFRF staff also compiled the following culinary information about scup:

- Availability: Year round, peak in April and October.
- Taste: Mild
- Color: White to off-white
- Texture: Lean and flaky
- Nutritional Information (per 3 oz. serving): Calories = 90, Calories from Fat = 20, Total Fat = 2.5 g, Saturated Fat = 0.5 g, Cholesterol = 45 mg, Sodium = 35 mg, Total Carbohydrates = 0 g, Protein = 16 g, Vitamin A = 2%, Calcium = 4%, Iron = 2%, Vitamin C = 0%.
- Nutritional Benefits: Low in sodium, high in niacin, phosphorous, vitamins B6 and B12, and selenium
- Market Selection: The eyes should be clear, with no sunken features; the gills should be bright red and clean; the flesh should be firm and spring back when lightly pressed; the fins should be intact, not torn or dry.
- Flavor Pairings: 1) Butter, lemon, capers, parsley, tomato; 2) Olive oil, chorizo, potato, thyme, onion; 3) Sesame oil, mushroom, miso, ginger, scallions; 4) Safflower oil, cilantro, lime, cumin, chipotle pepper.
- Wine Pairings: Sauvignon Blanc or Pinot Grigio.

This information was compiled into a scup brochure and distributed to local markets, restaurants, and culinary programs.

Remaining baseline research was focused on assessing interannual, seasonal, and spatial trends in scup landings and price per pound. To gather the needed data, CFRF queried landings and dealer databases from the National Marine Fisheries Service and the Rhode Island Department of Environmental Management. The most recent data available from both of these sources was from 2013. Between 2008 and 2013, Rhode Island scup landings sharply increased from 3.8 million pounds to 7.2 million pounds, while the Rhode Island scup fishery value increased gradually from \$2.3 million to \$3.8 million (Figure 1). Also during this time, the average annual price per pound for scup decreased from \$1.05/lb to \$0.55/lb. The average price per pound (coast-wide) between 2003 and 2013 was \$0.68.

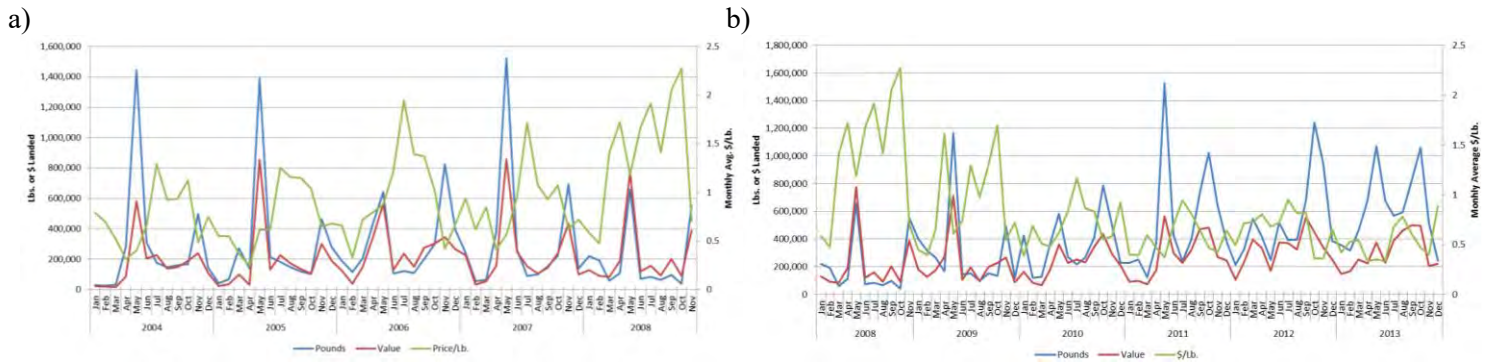


**Figure 1.** Annual coast-wide scup landings, value, and price per pound from 2003 to 2013. Data Source: NOAA National Marine Fisheries Service.

Seasonally, scup landings tend to be greatest during the months of May and November (Figure 2). Furthermore, landings during the winter and summer seasons are far lower than the spring and fall. The large number of landings in May and November may be related to the migration patterns of scup, as they move inshore in late spring and offshore in late fall. The apparent seasonality to the scup fishery effectively reduces fishing pressure during the spawning season, which has likely helped bolster the recovery and proliferation of this species.

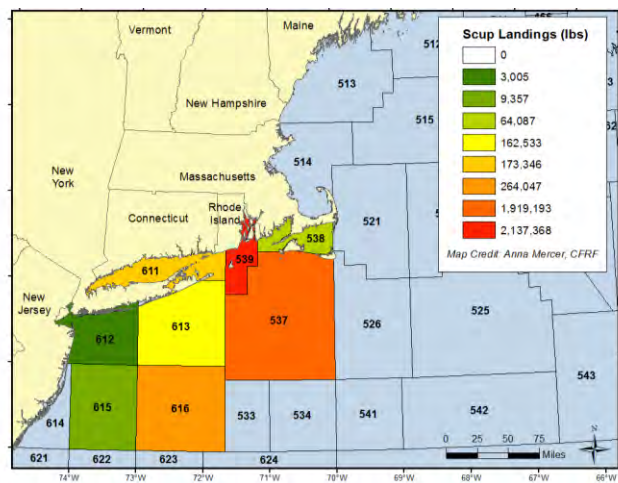


Seasonal trends in price per pound are opposite to trends in pounds landed (Figures 2). This relationship is likely due a low market capacity, which results in reduced ex-vessel price when the market is flooded (as low as \$0.01 per pound).



**Figure 2.** Monthly coast-wide scup landings, value, and price per pound between a) 2004 and 2008, and b) 2008 and 2013. Data Source: NOAA National Marine Fisheries Service.

Generally, scup are harvested from near-shore regions between Cape Cod and New Jersey (Figure 3). The majority of scup (76%) are harvested from statistical areas 539 and 537, which are located directly south of Rhode Island between 20 meters to 150 meters depth (Figure 3). These spatial trends are driven by the natural distribution of the species as well as the allocation of scup quota among states.



**Figure 3.** Distribution of coast-wide scup landings in 2013. Data Source: NOAA National Marine Fisheries Service.

The final component of background research focused on assessing the structure, trends, and impacts of scup quotas. From 2013 to 2015, the coast-wide Annual Catch Limit (ACL) for scup declined from 38.7 million pounds to 33.8 million pounds (Table 1). The coast-wide ACL for 2016 is 31.11 million pounds, which represents a further reduction of approximately 2.6 million pounds. These changes in ACL, however, have not impacted the scup fishery, as only 40-50% of the quota has been harvested annually. This under-harvest of scup is due to low market demand and ex-vessel price. Due in part to an unchanged market, scup harvest has varied insignificantly since 2013 (Table 1). The average price per pound for scup, however, has increased from \$0.50 per pound to \$0.67 per pound (Table 1). Fishermen remain hesitant to spend more time harvesting scup, however, as ex-vessel price is unpredictable and often extremely low (<\$0.10 per pound).

Year	ACL (lbs)	Coastwide Landings (lbs)	Coastwide Value (\$)	Coastwide Price (\$/lb)	Rhode Island Landings (lbs)	Rhode Island Value (\$)	Rhode Island Price (\$/lb)
2013	38,710,000	17,650,507	9,857,118	0.56	7,345,730	3,666,466	0.50
2014	35,990,000	16,079,289	9,799,782	0.61	6,948,872	4,118,299	0.59
2015	33,775,000	17,087,770	11,507,263	0.67	6,796,817	4,282,802	0.63

**Table 1.** The year, Annual Catch Limit (ACL), landings, value, and price per pound for scup coast-wide and in Rhode Island from 2013 to 2015.

### *Development of Marketing Research Questions:*

CFRF staff worked with industry fishing liaison Fred Mattera to develop research questions regarding the factors that govern the availability and supply of scup. Two sets of questions were developed, one for scup fishermen and one for seafood processors. The final list of research questions for scup fishermen included: 1) What species do you target? 2) What gear do you use? 3) How much scup do you typically land over the course of a year? 4) How much scup do you typically land per trip? 5) How much (percentage) of your scup quota do you harvest? 6) What is the size range of the scup that you land? 7) What months do you typically target/land scup? 8) Are there additional months when scup is available, but not typically landed? 9) What price range do you need to realize to regularly land scup?

The final list of research questions for seafood processors included: 1) How much scup is currently handled at your facility? 2) What is the fate of this scup? 3) Would you be prepared to invest in producing scup fillets if markets opened up? What volume (demand) is needed? Is there a threshold? 4) Will cold storage/freezing need to be part of your process? 4) Are there still challenges besides market demand that would need to be taken care of? Ex. Waste water disposal, transportation, energy costs? 5) What range price would you need to realize to increase your focus on scup? 6) What would you do with the waste products from processing scup? 7) Are you interested in opening up domestic markets for this species?

CFRF staff also developed a list of research questions targeted at identifying the food institutions interested in incorporating local seafood into their menus and the seafood product requirements associated with institutional utilization. The final list of research questions for food institutions included: 1) Does your institution/business currently purchase local seafood products? If so, what types of seafood and from what dealers? 2) Is your institution/business seeking to increase its amount of locally sourced food? 3) Does your institution/business currently sell or serve tilapia fillets? Are you interested in substituting a similar, local fish, such as scup? 4) Are the chefs and food preparation staff at your institution/business flexible with seafood products – can substitutions be made, such as scup for tilapia? 5) What are the specific product requirements for finfish products? 6) Is fresh fish preferred? Is frozen acceptable? 7) Does your institution/business purchase previously prepared fish products and reheat? 8) What is the volume needed per order? 9) How much advance time is needed to place an order? How far in advance does your institution/business plan menus? 10) How is food delivered to your institution/business? Is it trucked in from local sources? 11) What price per pound range does your institution/business expect to pay for fish fillets? 12) Are there any other factors that need to be considered when providing fish products to an institution/business such as yours?

Using these questions, specialized survey forms were created for scup fishermen, seafood processors, and food institutions. Copies of these survey forms are provided in the “Project Documents”.

### *Data Gathering - Interviews & Meetings:*

Between March and June 2016, the project team reached out to over 100 fishermen, 25 food institutions, and representatives from each seafood processing company located in Rhode Island (Sea Freeze Ltd., Sea Fresh USA, and The Town Dock). Both digital and hard copies of the aforementioned questionnaires were distributed. CFRF staff primarily targeted members of the small mesh trawl fleet in Point Judith, Rhode Island, but information was also gathered from fishermen in Newport and Sakonnet Point, Rhode Island. The food institutions included in outreach efforts included: University of Rhode Island, Johnson & Wales University, Brown University, Rhode Island School of Design, Roger Williams University, Bryant University, Salve Regina University, Providence College, Rhode Island College, South County Hospital, Rhode Island Hospital, Kent County Hospital, Miriam Hospital, Westerly Hospital, Dave’s Marketplace, and Shoreside Market.

In addition to questionnaire distribution and solicitation, the project team conducted in-person interviews with Sea Freeze, Sea Fresh, The Town Dock, Brown University, Rhode Island School of Design, Johnson & Wales University, University of Rhode Island, Dave’s Marketplace, Food Export USA, Eat Drink RI, Farm Fresh Rhode Island, Rhode Island Director of Food Strategy, and Health Care Without Harm. As a result of these research and outreach efforts, an investment firm, IDA Group, became interested in sponsoring the development of a scup processing facility in Rhode Island. CFRF shared preliminary project results regarding the scup fishery and market with IDA Group partner Charles Giessen and connected him to representatives from each seafood processing company in Rhode Island.

### *Economic Incentive Programs:*

The project team conducted a thorough review of economic incentive programs that could be applied to the development of a scup processing facility in Rhode Island and met with representatives from a variety of possible funding sources, including: John Riendeu, Commerce RI; Rachel Myroniuk, Commerce RI; Christine Smith, Commerce RI; Betsy Santarasci, Partnership for a Greater Providence; Diane Lynch, Social Enterprise Greenhouse; Janet Coit, Rhode Island Department of

Environmental Management; Ken Ayers, Rhode Island Department of Environmental Management; Jason McNamee, Rhode Island Department of Environmental Management; Larry Mourajian, Rhode Island Department of Environmental Management; Susan AnderBois, Rhode Island Governor's Office; Mark Huang, City of Providence; Dennis Nixon, Rhode Island Sea Grant; Azure Cygler, Coastal Resources Council; Charles Giessen, IDA Group; Amber Caulkins, The Collaborative; and Jennifer Pereira, Rhode Island Foundation. Prior to CFRF's outreach efforts, many Rhode Island leaders, policy makers, food institutions, and consumers were largely unaware of the availability of scup and the potential applicability to Rhode Island's food system.

Federal funding sources, such as the United States Department of Agriculture, could provide low-interest loans for developing a scup processing facility, but the project team did not identify any federal grant programs that could cover the costs completely. Within the state, the Rhode Island Commerce Corporation (Commerce RI) offers a number of financial assistance programs, both in the form of low-interest loans and grants. All grants, however, must be shared industry-wide, and thus would need to be approached collaboratively by all seafood processing companies in the state (Sea Freeze, Sea Fresh, The Town Dock). A number of other economic incentive programs were explored, but none were applicable to the development of a scup processing facility in Rhode Island either because the quantity of available funds were inadequate or the funding priorities were mismatched. Over the course of the project, however, local agencies and organizations expressed interest in supporting smaller-scale projects to boost awareness and utilization of local seafood in Rhode Island.

### *Culinary & Consumer Outreach:*

Over the course of the project, CFRF executive director, Dr. Anna Mercer, and industry liaison, Fred Mattera, worked with chefs and culinary students at Johnson and Wales University (JWU) to improve awareness of scup and other locally harvested species as well as explore ways to integrate local seafood into food service menus and home-cooked meals. As part of these efforts, Mercer gave presentations about seafood sustainability and a chef's role in supporting local fisheries to Dr. Bradley Ware's "Supervision for Food Service Professionals" class as well as Chef Branden Lewis's "Sustainability in the Culinary Kitchen" class. These events included an introduction to locally harvested fish species, including scup, as well as opportunities to fillet and prepare underutilized seafood species. In total, these presentations/demonstrations reached over 150 culinary students and six chef instructors. CFRF also worked with JWU Assistant Dean, Chef William Idell, to implement an extracurricular "skills class" at Johnson and Wales University, during which Fred Mattera taught students how to source, fillet, and cook scup. This event reached approximately 30 culinary students and four chefs. A number of prospective JWU culinary students and their families also attended this event. To further bolster culinary student knowledge and interest in sourcing local seafood, Mercer and Mattera arranged and led a tour of the port of Point Judith, including a tour of The Town Dock seafood processing facility, tours of different types of fishing vessels, and discussions with local fishermen. Over 20 JWU culinary students and chefs participated in these tours.

Over the course of this project, it became clear that a major impediment to realizing the utilization of scup by home cooks was a lack of understanding of how to prepare the product. To address this challenge, CFRF worked with JWU chefs and culinary students to develop scup recipes for home cooks. During the spring of 2016, CFRF solicited scup recipes from JWU culinary students, which were reviewed by CFRF staff and members of the fishing industry (recipe solicitation flyer provided in "Project Documents"). The top five recipes were selected based upon consumer appeal and ease of preparation and included: "Scup Tacos", "Scup Curry", "Chili Lime Scup", "Southern Fried Scup", and "Scup Cakes". To determine the best scup recipe for everyday seafood consumers, CFRF organized a "Scup Cookoff", during which the culinary students responsible for the top five recipes prepared and presented their scup dish to a panel of judges. The students were provided with five whole scup, a selection of pantry items, a full kitchen (at JWU), and 2 hours to prepare their dishes. The cookoff was spectated by over 30 JWU culinary students, who became acquainted with filleting and cooking scup. The Judges Panel, which included representatives from the fishing industry, a local seafood market (Dave's Marketplace), and professional chefs, also watched the students prepare and plate their dishes. In the end, the Judges Panel tasted and discussed each dish, and rated them based upon flavor, marketability, adaptability, professionalism, and sanitation (scale of 1 – 10, judging rubric provided in "Project Documents"). Specifically, the Judges Panel was looking for a dish that was recognizable to everyday consumers, exhibited balanced and natural seasonings, and was easy to recreate in a home kitchen. The scores for each dish were tallied, and the winner of the competition was "Grilled Fish Tacos with Pineapple Salsa" by Amber Baden. CFRF posted recipes and photos from the Scup Cookoff on the project webpage (<http://www.cfrfoundation.org/scup-marketing/>), CFRF news blog, and CFRF Facebook page. JWU chefs and administrators expressed high regard for CFRF's sustainable seafood outreach in the classroom and kitchen, stating "Dr. Mercer's time with the faculty and students in the College of Culinary Arts has had a significant impact on our understanding of the importance of taking a more sustainable approach to managing our oceans and our wild fish stocks."

The ultimate goal of the Scup Cookoff was to develop appealing and easy-to-prepare recipes that would encourage local seafood consumers to try cooking scup in their home kitchen. The Judges Panel determined that all five scup dishes were suitable for public dissemination. Thus, to bring scup recipes directly to Rhode Island consumers, CFRF organized a public tasting event at Dave's Marketplace, which involved Grilled Scup Taco sampling, scup fillet demonstrations, and circulation of information about the sustainability and palatability of scup (photos provided in "Project Documents"). Over 250 Grilled Scup Tacos were prepared and served, and far more individuals received recipe cards and brochures. Most consumers were unfamiliar with scup, but all were complementary of the Grilled Scup Tacos and many purchased scup to prepare for their families that night. As a result of these efforts, Dave's Marketplace now consistently carries whole scup at their seafood counter, which they fillet at no extra cost. This provides a marketing model that that other seafood retailers could follow in the future, both in Rhode Island and beyond.

Local restaurants represent a substantial market for underutilized seafood species, such as scup. Thus, in an effort to educate and encourage local Rhode Island restaurant chefs to incorporate scup and other underutilized species into their menus, CFRF held a "Rhode Island Seafood Chef's Table" event on July 21<sup>st</sup>, 2016. The event was held at Hope & Main in Warren, RI and included a lively discussion of seafood harvesting practices with local fishermen, an opportunity to break down and prepare a variety of RI-harvested fish and shellfish, and a tasting and review of seafood dishes. Participants included: Chef Derek Wagner from Nick's On Broadway, Chef Matthew Gennuso from Chez Pascal, Chef Matthew Varga from Gracie's, Chef Joe Simone from Simone's, Chef Rick Allaire from Metacom Kitchen, Chef Benjamin Mayhew from Garde de la Mer, Chef Aaron Thorpe from Cook & Dagger, Chef Alan Bagley from Bacaro, and Chef Andy Kientz from North, David Spencer, F/V Nathaniel Lee, and Fred Mattera. The goal of this event was to showcase the natural beauty of the seafood, so CFRF provided a basic pantry and simple cooking stations. Chefs from Johnson and Wales University (Chef Matthew Britt, Chef Bill Idell, and Chef Rob Lucier) helped organize and implement the event. JWU also donated a variety of pantry items. Participant chefs were thrilled to interact with local fishermen and learn about alternative seafood products, including: butterfish, dogfish, conger eel, fluke, Jonah crab, monkfish, quahogs, scup, sea robin, skate, squid, and whelk. This event provided chefs with a heightened awareness for what Rhode Island seafood has to offer as well as new ideas for how to incorporate it into their menus. For example, Chef Derek Wagner demonstrated the versatility and appeal of scup on restaurant menus, and Chef Matt Gennuso from Chez Pascal hoped to use local whelks for escargot. Press coverage (Rhode Island Public Radio, JWU News) and photos of this event are provided in "Project Documents".

#### *Compilation of Results:*

##### *Publications:*

The biological, fishery, and culinary information gathered by CFRF staff was compiled into an easy-to-read scup brochure, which highlights the sustainability of the species and the importance of buying local seafood. A copy of this tri-fold brochure is provided in "Project Documents". Two hundred brochures were provided to local markets and RI agencies for distribution to local seafood consumers and interest groups. Brochures were also distributed to JWU students and restaurant chefs who participated in the RI Seafood Chef's Table. In addition to the scup brochure, CFRF also created recipe cards for all scup recipes developed and vetted through the Scup Cookoff at JWU. Copies of photo recipes and recipe cards are provided in "Product Documents". All documents were posted on the project webpage (<http://www.cfrfoundation.org/scup-marketing/>), announced on the CFRF news blog, and shared on the CFRF Facebook page.

##### *Scup Supply Chain - Harvest:*

The input received from scup fishermen via interviews, questionnaires, and meetings highlighted the following factors as important in governing the harvest of scup: catch limits, seasonality, availability of higher-value species, ex-vessel price, fish size, and at-sea handling. The maximum quantity of scup that can be harvested annually (Annual Catch Limit, ACL) is set by the Mid-Atlantic Fisheries Management Council as part of the Summer flounder, Scup, and Black Sea Bass Fisheries Management Plan. The scup ACL, however, has little impact on the total quantity of scup that is harvested annually, as the fishery is grossly under-realized (<50% of ACL is harvested). If the scup fishery were to be fully realized, over 30 million pounds of scup would be available to seafood consumers. Given a fillet efficiency of approximately 30%, 30 million pounds of whole scup equates to approximately 9 million pounds of scup fillets.

The coast-wide scup ACL is divided into three harvest periods (Table 2). Within each harvest period, fishing vessels are allowed to land a specific quantity of scup daily (maximum pounds of scup per day per vessel, Table 2). Any unused quota from the Winter I harvest period is transferred to the Winter II harvest period, and the daily limit of the Winter II harvest period is increased accordingly. In 2016, 3.2 million pounds of the Winter I harvest period were unused and rolled over to the Winter II harvest period.

Harvest Period	Months	Percent of ACL	Daily Limit (pounds)
Winter I	January-April	45.11%	50,000
Summer	May-October	38.95%	18,000
Winter II	November-December	15.94%	12,000

**Table 2.** The time frame, percent of Annual Catch Limit (ACL), and daily limit for each scup harvest period.

Due to the reduced trip limit during the summer months, fishermen do not typically target scup during this time. The low and unpredictable market prices for scup require a higher daily harvest (>20,000 pounds) to be profitable. Interestingly, these dynamics effectively reduce fishing pressure during the scup spawning season (May-August), which further promotes the sustainability of the fishery.

Other factors that govern the harvest of scup include seasonal migration/distribution and availability of other, higher-value species. Scup is a migratory species that spends the winter months on the outer continental shelf, and the spring, summer, and fall months on the inner continental shelf. When scup are distributed inshore, they are more accessible to the fishing fleet, and, thus, more likely to be harvested. Consequently, the quantity of scup landed in any given month depends not only on the available quota, but also the accessibility of the fish to the fishing fleet. These two factors explain why the majority of scup are harvested in the early spring and late fall (higher quotas and inshore distribution). Furthermore, in months where other, higher-value species, such as squid and summer flounder, are available for harvest, most fishermen focus on those species rather than scup. As such, the peak of the squid fishery in the summer months contributes to the low landings of scup during that season. .

Another factor that fishermen consider when harvesting scup is the size and market price of the fish. The three size classes of scup (medium, large, and jumbo) have increasing value and thus, are targeted differentially. If there were a wider market (and higher price) for medium scup, fishermen would be able to increase their harvest capacity substantially. Fishermen unanimously felt that a minimum ex-vessel price of \$0.50 per pound for medium scup and \$0.75 per pound for large and jumbo scup is necessary to validate an increased focus on harvesting this species.

At-sea handling issues also factor in to fishermen’s willingness to harvest scup. Scup are notoriously difficult to move around on deck (a number of fishermen referred to them as the “Velcro of the sea”) and are easily bruised in the cod-end and during storage in a vessel’s hold. Thus, research is needed to develop the handling techniques that maintain the quality of individual scup, while minimizing the handling burden at sea. Such techniques may include: shorter tow durations, smaller catch quantities, larger cod-end mesh size, toting of fish in the hold, and minimizing of time between catching and landing scup.

#### *Scup Supply Chain - Processing:*

The input received from seafood processing companies in Rhode Island highlights the challenges related to processing, storing and marketing scup. Generally, RI seafood processing companies are reluctant to invest in scup fillet machinery and marketing campaigns for reasons such as high up-front costs of scup processing equipment, unknown freezing, thawing, and refreshing techniques, limited wastewater capacity, the size of scup fillets, and the lack of committed buyers.

The high and variable volume of scup landings throughout the year, in combination with the need for a consistent supply for large-scale buyers of scup fillets, such as supermarkets, universities, and hospitals, requires that the product be frozen and refreshed. All Rhode Island processing companies have the capacity and ability to freeze and store large quantities of scup, but the method for producing a marketable scup fillet product, from at-sea handling to freezing and thawing techniques, is unknown. The quality of a frozen/refreshed scup fillet product is also unknown. Thus, further research is needed to develop at-sea and shore-side processing techniques and prove refreshed scup fillet quality.

In terms of price, seafood processors cited the need for an ex-vessel price of no more than \$0.50 per pound to produce a scup fillet product that is competitive with tilapia, which has a market price of approximately \$3.50 per pound. If scup fetched a higher market price due to fishery sustainability and consumer awareness, a higher ex-vessel price could be offered. Furthermore, the existing small-scale market for whole scup offers higher ex-vessel prices of up to \$2.00 per pound. Finding a balance between the quantity and price of scup destined for the fillet market and the quantity and price of scup destined for the whole-fish market is key to realizing the potential of the scup fishery.

In addition to unknown freezing, thawing, and storage techniques, product quality, and market prices, another major challenge that prevents RI seafood processing companies from investing in scup fillet equipment is limited wastewater

capacity. The primary issue is that the quantity and composition of the wastewater produced by seafood processing facilities far exceeds the capacity of municipal wastewater treatment facilities in Rhode Island. Thus, fish processing companies must transport wastewater to other treatment facilities, at substantial cost to the business. The exaggerated costs of wastewater disposal put Rhode Island seafood processors at a disadvantage to competitors in other states, and is a primary issue that is preventing the development of a scup processing facility in Rhode Island.

The processing of whole scup into boneless, skinless fillets would produce a variety of byproducts, such as racks, pin bone sections, and skin. There are many possible uses of scup processing byproducts, such as fertilizer, bait, soup base, and pet food. The techniques to produce these products, however, are undeveloped, and markets are uncertain. Thus, seafood processing companies must consider the disposal of scup byproducts as an expense in the scup fillet production process. This effectively increases the estimated market price of scup and decreases the ex-vessel price.

Over the course of the project, CFRF worked with an investment group that was interested in developing an investment plan that would allow RI fish processing companies to add scup processing to their existing businesses without negatively impacting either their capital or cash flow position. For the reasons mentioned above (unknown freezing/refreshing techniques, product quality, waste water capacity), however, the investment group's offer has not been implemented.

#### *Scup Supply Chain – Local Food System:*

Overall, there is strong interest in incorporating scup and other local seafood into the Rhode Island food system. All retailers, universities, and hospitals reached throughout this project expressed interest in selling or serving scup, either as a new product or as a replacement for tilapia. For many food institutions, however, procuring local, underutilized seafood species in a usable form is a challenge. The vast majority of food institutions require or prefer fish to be provided as boneless fillets, but scup is currently only available as whole fish. Whole fish require more cold storage space as well as time and effort to break down. Further complicating the scup procurement issue is the fact that universities and hospitals rely on specific vendors/distributors to provide their food and seafood products. Sysco is the most widely used food distributor in Rhode Island, although some institutions also use local seafood purveyors, such as Foley Fish. Thus, in order to fully integrate scup and other underutilized seafood species into the larger food system, both large and small scale food distributors need to be aware of and interested in offering scup. The same awareness and assurance is needed by meal program managers, such as Sodexo, Aramark, and Compass Group, which are widely used by food institutions. The complexity of integrating local products into food institutions inspired the creation of the Food to Institution Rhode Island (FIRI) steering committee, led by the Director of Food Strategy for the State of Rhode Island. CFRF Executive Director Anna Mercer serves on the FIRI steering committee and continues to work to integrate scup and other local seafood products into Rhode Island's food system.

General seafood preferences cited by the food institutions include:

- Fillets preferred. Whole fish acceptable in small quantities.
- Boneless, skinless fillets preferred. Skin-on fillet acceptable for catering or small-scale menus.
- Fresh or refreshed fillets preferred. Frozen fillets acceptable, preferably IQF (Individual Quick Frozen).
- 4-5 ounce fillet preferred. 3 ounce fillet acceptable.
- Order Size: 30-300 pounds, depending on the institution and application.
- Order Frequency: Weekly or Monthly, depending on the institution.
- Price Range: \$3.00 - \$9.00 per pound. Some institutions willing to pay more for a local seafood product.

Finally, a recognizable and appealing product name is important for achieving buy-in from food institutions, retailers, and consumers. Thus, re-branding scup as "sea bream" or "silver snapper" may help to encourage market growth.

#### *Scup Supply Chain – Availability vs. Demand:*

In 2015, approximately 6.8 million pounds of whole scup were landed in Rhode Island. Assuming 80% of landed scup were processed into scup fillets at 30% efficiency, approximately 1.63 million pounds of Rhode Island scup fillets would be available to the market. Under the same assumptions, if the coast-wide scup fishery were fully realized (~30 million pounds landed), approximately 7 million pounds of scup fillets would be available to the market. Based upon the input received from food institutions regarding the frequency and quantity of scup that could reasonably be served or sold annually, the potential institutional demand for scup fillets in Rhode Island is approximately 150,000 pounds per year. If scup fillets were to fully replace tilapia on all university and hospital menus, there would be an additional demand of approximately 100,000 pounds per year. Given these figures, Rhode Island food institutions could absorb approximately 15% of scup fillets

produced in Rhode Island annually. Thus, regional and national markets will be essential to fully utilizing the available product, especially if the fishery were fully realized.

## Outcomes

- *Describe and quantify progress towards achieving the project outcomes described in your grant agreement. (Quantify using the approved metrics referenced in your grant agreement or by using more relevant metrics not included in the application.)*
- *Briefly explain discrepancies between what actually happened compared to what was anticipated to happen.*
- *Provide any further information (such as unexpected outcomes) important for understanding project activities and outcome results.*

This project successfully initiated the development of a local market for scup by increasing consumer, chef, and food institution awareness of the availability and versatility this seafood product. This research can be utilized by local seafood processors to evaluate risks and strategize their own business plans regarding scup processing. Developing a consistent demand for scup by large-scale food institutions, however, was unachievable during this project. This is in part due to the complexity of food procurement (i.e. vendor services, meal program managers) in institutional settings as well as the remaining technical issues preventing scup fillets from being available to the market (i.e. at-sea handling, freezing and refreshing techniques). Nonetheless, this work represents substantial progress towards opening markets for and increasing awareness of scup in Rhode Island.

As cited in the grant agreement, the following metrics were used to quantify the outcomes of the project:

1. Number of participants in outreach activities:
  - Over 500 seafood consumers, chefs, culinary students, policy makers, scientists, and industry members were directly reached during this project. An additional 3,500 individuals were reached via CFRF's website, news blog, and Facebook communications.
2. Number of Rhode Island seafood processing companies investing in scup processing equipment:
  - None of the Rhode Island seafood processing companies have invested in scup processing equipment, but all have been presented with an investment plan developed by IDA Group. Furthermore, Pier Fish in New Bedford, Massachusetts recently purchased a new processing machine that could be used to fillet scup. If realized, this venture could provide a proof of concept for processing companies in Rhode Island.
3. Change in scup landings using 2013 data as the baseline:
  - There was a slight reduction in coast-wide scup landings from 17.65 million pounds in 2013 to 17.09 million pounds in 2015. Similarly, there has been a slight reduction in Rhode Island scup landings from 7.3 million pounds in 2013 to 6.79 million pounds in 2015.
4. Change in Annual Catch Limit (ACL) utilization based on 2013 as the baseline:
  - There was a reduction in scup ACL from 38.71 million pounds in 2013 to 31.11 million pounds in 2016. Utilization of scup ACL, however, increased from 45.6% in 2013 to 50.6% in 2015.
5. Change in market price using mean price per pound in 2013 as the baseline:
  - There was an increase in coast-wide scup price per pound from \$0.56 in 2013 to \$0.67 in 2015. There was also an increase in Rhode Island scup price per pound from \$0.50 in 2013 to \$0.63 in 2015. The variability of market price within the year, however, is extreme, with prices reaching as low as \$0.01 per pound. The most common ex-vessel price (mode) from 2013-2015 was \$0.30 per pound.
6. Percent change in profitability:
  - There was an increase in coast-wide scup fishery value from \$9.86 million in 2013 to \$11.5 million in 2015. There was also an increase in Rhode Island scup fishery value from \$3.67 million in 2013 to \$4.28 million in 2015.

It is important to note that metrics 3-6 listed above do not reflect the impacts of this project, as the 2016 landings, utilization, and market price data are not yet available. Furthermore, the majority of this project was conducted in 2016, so the impacts will be likely be immeasurable until late 2017.

In addition to the outcomes stated above, this project resulted in CFRF Executive Director, Dr. Anna Mercer, being elected to serve on the Rhode Island Food Policy Council as a fisheries/seafood specialist. Mercer will continue to work on CFRF's behalf to increase utilization of underutilized seafood, such as scup, in the local food system.

## 3. Lessons Learned

*Describe the key lessons learned from this project, such as the least and most effective conservation practices or notable aspects of the project's methods, monitoring, or results. How could other conservation organizations adapt their projects to build upon some of these key lessons about what worked best and what did not?*



Key lessons learned from this project include:

- Food institutions, retailers, restaurants, and seafood consumers in Rhode Island are keenly interested in expanding their knowledge and use of scup and underutilized seafood species. Access to scup fillets, the preferred product type for food institutions, retailers, and consumers, however, is very limited.
- Incorporating scup or other underutilized species into institutional and retail food systems requires commitments from large-scale food distributors, such as Sysco, as well as meal program managers, such as Compass Group.
- Scup has to compete with low cost, imported seafood products, such as tilapia. Realizing a competitive wholesale price while also maintaining a stable and sufficient ex-vessel price presents a major challenge for incorporating scup in institutional food systems.
- Fishermen would be willing to harvest more scup if minimum market prices were stable around \$0.50 per pound.
- RI seafood processing companies remain reluctant to invest in scup fillet machinery and marketing campaigns, but out-of-state seafood processors have begun to express interest.
- Insufficient wastewater capacity is a major factor that is preventing RI seafood processing companies from expanding their business to include scup processing.
- In order to bring scup fillets to market, additional research is needed to determine the at-sea handling methods and shore-side freezing and refreshing techniques that produce a clean and palatable fillet in large quantities.
- If scup fillets were consistently available at a price point between \$3.50 and \$4.50 per pound, approximately 15% of scup landed in Rhode Island could be utilized by local food institutions and small-scale retailers. Further research is needed to investigate and develop regional and national markets for scup.
- Re-branding scup as “sea bream” or “silver snapper” may help to encourage market growth.

#### **4. Dissemination**

*Briefly identify any dissemination of lessons learned or other project results to external audiences, such as the public or other conservation organizations.*

Project findings were disseminated via presentations, meetings, and discussions with government agencies, environmental organizations, fisheries scientists and managers, food systems strategists, members of the fishing industry, and reporters in the local media, including: 1) Meetings with the director of the Rhode Island Department of Environmental Management (RI DEM), chief of RI DEM Division of Marine Fisheries, and chief of RI DEM Division of Agriculture, 2) Presentation to and continued work with the Food to Institution Rhode Island steering committee, 3) Meetings with investors (IDA Group) looking to develop new seafood markets in Rhode Island, 4) Presentation to and continued communication with the director for Food Strategy for Rhode Island, 5) Presentation to and meeting with regional coordinator for Healthy Food in Health Care, 6) Presentations to and discussions with Rhode Island seafood processing company representatives, 7) Presentation to and continued communication with seafood processing and retail companies in Massachusetts, Red’s Best and Pier Fish, 8) Meetings with the director of Social Enterprise Greenhouse, 9) Meetings with the executive director of Partnership for a Future Greater Providence, 10) Presentation to and discussion with the Director of Economic Development for Providence, Rhode Island, 11) Presentation to and discussion with Rhode Island Sea Grant and Coastal Resources Center staff, 12) Discussion with Seafood 1 on 1 coordinator, 13) Presentation, demonstration, and continued communication with local restaurant chefs, 14) Presentations to Rhode Island Seafood Marketing Collaborative, 15) Meeting and discussion with Rhode Island Food Policy Council and Eat Drink RI, 16) Meetings with the administration (Dean, Assistant Dean) at Johnson & Wales University, 17) Presentation to fisheries management class at University of Rhode Island, 18) Presentations to and discussion with Rhode Island Senators Jack Reed and Sheldon Whitehouse, and 19) Interviews with Rhode Island Public Radio and Commercial Fisheries News.

#### **5. Project Documents**

*Include in your final programmatic report, via the Uploads section of this task, the following:*

- 2-10 representative photos from the project. Photos need to have a minimum resolution of 300 dpi and must be accompanied with a legend or caption describing the file name and content of the photos;
- report publications, GIS data, brochures, videos, outreach tools, press releases, media coverage;
- any project deliverables per the terms of your grant agreement.

**POSTING OF FINAL REPORT:** *This report and attached project documents may be shared by the Foundation and any Funding Source for the Project via their respective websites. In the event that the Recipient intends to claim that its final report or project documents contains material that does not have to be posted on such websites because it is protected from disclosure by statutory or regulatory provisions, the Recipient shall clearly mark all such potentially protected materials as “PROTECTED” and provide an explanation and complete citation to the statutory or regulatory source for such protection.*































**Photo Captions:**

“CFRF\_DavesMarketScupTasting\_AmberBaden.jpeg” – Johnson & Wales University culinary student Amber Baden ready to serve her winning dish, Grilled Scup Tacos, at Dave’s Marketplace in East Greenwich, Rhode Island.

“CFRF\_DavesMarketScupTasting\_FilletDemo.jpeg” - Johnson & Wales University culinary student Amber Baden demonstrating how to fillet scup at Dave’s Marketplace in East Greenwich, Rhode Island.

“CFRF\_DavesMarketScupTasting\_ServingTacos.jpeg” - Johnson & Wales University culinary student Amber Baden serving her winning dish, Grilled Scup Tacos, at Dave’s Marketplace in East Greenwich, Rhode Island.

“CFRF\_JWUclass\_Demo\_Anna\_Mercer.jpeg” – CFRF Executive Director, Dr. Anna Mercer, introducing Johnson & Wales University culinary students to scup and other Rhode Island seafood species in Chef Branden Lewis’ “Sustainability in the Culinary Kitchen” class.

“CFRF\_JWUPortTour\_Aaron\_Fluke.jpeg” – Aaron Ferri from The Town Dock demonstrating how sushi-grade fluke is processed to Johnson & Wales Culinary students and Chef Matthew Britt.

“CFRF\_JWUPortTour\_Fred\_Blackback.jpeg” – Fred Mattera giving a tour of the port of Point Judith to Johnson & Wales Culinary students and Chef Matthew Britt.

“CFRF\_RISeafoodChefsTable\_AllChefs&Dishes.jpeg” – Rhode Island restaurant chefs and their seafood dishes prepared during CFRF’s “Rhode Island Seafood Chef’s Table” event at Hope & Main in Warren, Rhode Island.

“CFRF\_RISeafoodChefsTable\_DerekWagner\_Scup.jpeg” – Chef Derek Wagner from Nick’s on Broadway preparing scup during CFRF’s “Rhode Island Seafood Chef’s Table” event at Hope & Main in Warren, Rhode Island.

“CFRF\_ScupCookoff\_Prep.jpeg” – Johnson & Wales University culinary students preparing scup during CFRF’s Scup Cookoff at Johnson & Wales University in Providence, Rhode Island.

“CFRF\_ScupCookoff\_Spectators.jpeg”- Spectators watching Johnson & Wales University culinary students LaSenda Smith fillet scup during CFRF’s Scup Cookoff at Johnson & Wales University in Providence, Rhode Island.



COMMERCIAL FISHERIES  
RESEARCH FOUNDATION

P.O. Box 278, Saunderstown, RI 02874  
Phone: (401) 515-4892 | Fax: (401) 515-3537  
www.cfrfoundation.org

## Scup Fishery Questionnaire

Once complete, please return this form to the Commercial Fisheries Research Foundation via email (amalek@cfrfoundation.org), fax (401-515-3537), or ground mail (P.O. Box 278, Saunderstown, RI 02874). Thank you for your time!

Name:

Title:

Affiliation:

Email:

Phone:

1. What species do you target?
2. What gear do you use?
3. How much scup do you typically land over the course of a year?
4. How much scup do you typically land per trip?
5. How much (percentage) of your scup quota do you harvest?
6. What is the size range of the scup that you land?
7. What months do you typically target/land scup?
8. Are there additional months when scup is available, but not typically landed?
9. What price range do you need to realize to regularly land scup?
10. Are you interested in talking with local chefs about local seafood products?



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### **Scup Processing Questionnaire**

Once complete, please return this form to the Commercial Fisheries Research Foundation via email ([amalek@cfrfoundation.org](mailto:amalek@cfrfoundation.org)), fax (401-515-3537), or ground mail (P.O. Box 278, Saunderstown, RI 02874). Thank you for your time!

Name:

Title:

Affiliation:

Email:

Phone:

1. How much scup is currently handled at your facility?
2. What is the fate of this scup?
3. Would you be prepared to invest in producing scup fillets if markets opened up? What volume (demand) is needed? Is there a threshold?
4. Will cold storage/freezing need to be part of your process?
5. Are there still challenges besides market demand that would need to be taken care of? Ex. Waste water disposal, transportation, energy costs?
6. What range price would you need to realize to increase your focus on scup?
7. What would you do with the waste products from processing scup?
8. Are you interested in opening up domestic markets for this species?





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## Questionnaire on Seafood Product Requirements and Consumer Needs

*The Commercial Fisheries Research Foundation is exploring ways to expand the utilization of local and sustainable seafood products in the state of Rhode Island, and is soliciting input regarding seafood product requirements and consumer needs. Your participation will help us determine which species and processing techniques best accommodate the seafood needs of consumers around the state. In the end, the CFRF hopes to expand the diversity and quantity of local, fresh seafood that is sustainably harvested by the fishing industry and directly used by food institutions in Rhode Island.*

Once complete, please return this form to the Commercial Fisheries Research Foundation via email (amalek@cfrfoundation.org), fax (401-515-3537), or ground mail (P.O. Box 278, Saunderstown, RI 02874). Thank you for your time!

Name:

Title:

Affiliation:

Email:

Phone:

1. Does your institution/business currently purchase local seafood products? If so, what types of seafood and from what dealers?
2. Is your institution/business seeking to increase its amount of locally sourced food?
3. Does your institution/business currently sell or serve tilapia fillets? Are you interested in substituting a similar, local fish, such as scup (*Stenotomus chrysops*)?
4. Are the chefs and food preparation staff at your institution/business flexible with seafood products – can substitutions be made, such as scup for tilapia?



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5. What are the specific product requirements for finfish products?
  - a. Is fish sold/served as a simple fillet or does your institution/business prepare it in other ways (e.g. fish cakes?)
  - b. Are boneless fillets or whole fish preferred?
  - c. Does the skin need to be removed from fish fillets?
  - d. What is the minimum size portion or minimum size fillet?
  - e. What types of fish does your institution/business current sell/serve?
  - f. Other?
6. Is fresh fish preferred? Is frozen acceptable?
7. Does your institution/business purchase previously prepared fish products and reheat?
8. What is the volume needed per order?
9. How much advance time is needed to place an order? How far in advance does your institution/business plan menus?
10. How is food delivered to your institution/business? Is it trucked in from local sources?





## Scup Curry

Submitted by: Mariama Jallow

**PREP TIME:** 20 mins **COOK TIME:** 40 mins  
**SERVES:** 4



### INGREDIENTS:

1 medium onion  
4 cloves garlic  
½ red bell pepper  
4 tablespoons butter  
¼ cup curry powder  
1 tablespoon kosher salt  
½ tablespoon ground black pepper  
½ cup coconut milk  
½ tablespoon tomato paste  
1 cap lemon juice  
1 cap vinegar  
8 pieces Scup fillets

### DIRECTIONS:

Marinate Scup fillets in a bowl with lemon juice, vinegar, salt and pepper. In a small bowl, mix curry powder with coconut milk. Puree onion, garlic and bell pepper. In a medium sauce pan, melt butter on low heat. Add puree to melted butter. Cook covered for about 15 minutes (stir occasionally). Add tomato paste and blend. Mix in the curry coconut milk mixture. Let simmer 15 minutes. Season to taste with pepper and salt.

Add Scup fillets gently on top of simmering mixture. Do not stir. Simmer on low (to avoid burning sauce) for about 8 minutes or until cooked.

If coconut milk is not available, you may use any brand cream.

You may also add more lemon and vinegar to the sauce before putting in the scup fillets according to your taste.

Recipe provided courtesy of the Commercial Fisheries Research Foundation.

# GRILLED SCUP TACOS

Submitted by: Amber Baden

**PREP TIME:** 15 mins **COOK TIME:** 10 mins  
**SERVES:** 4



## INGREDIENTS:

8 corn tortillas  
4 6-8 oz scup fillets (boneless, skinless)  
2 tablespoons extra virgin olive oil  
2 teaspoons garlic, minced  
3 teaspoons ground cumin  
1 lime, juice of  
1 teaspoon salt & pepper, each

### Grilled Pineapple Salsa:

1 fresh pineapple, cored, 1/2 " strips  
1 red and yellow bell pepper, each  
1 jalapeno  
1 red onion, diced  
2 tablespoons chopped fresh cilantro  
1 teaspoon salt

1/2 teaspoon black pepper  
2 limes, juice of

### Pickled Cabbage Slaw:

3 cups shredded red cabbage  
1/2 cup red wine vinegar  
2 tablespoons sugar  
1 teaspoon salt

### Spicy Avocado Crema:

2 avocados  
1 cup sour cream  
1-2 tablespoons Sriracha  
1/2 teaspoon cumin  
1/2 teaspoon garlic powder

## DIRECTIONS:

Mix olive oil, minced garlic, cumin, lime juice, salt and pepper. Coat on fish in a bowl and cover tightly. Set aside in refrigerator until needed. Drain liquid prior to serving.

Pickled cabbage slaw: mix red wine vinegar, sugar, and salt together, pour over cabbage in a bowl. Cover tightly and set aside until needed.

Grilled pineapple salsa: lightly drizzle olive oil on peppers and jalapeno. Grill with pineapple strips until caramelized. When cool, dice all. Mix gently with onion, cilantro, lime juice, salt and pepper. Reserve in refrigerator until needed.

Spicy Avocado Crema: Blend avocados, sour cream, Sriracha, lime juice, cumin, garlic powder and salt until reaches a smooth consistency.

Grill fish on preheated and oiled grill for about 5 minutes on each side. Grill tortillas for about 1 minute on each side.

Assemble tacos with fish, cabbage, salsa and avocado crema..

Recipe provided courtesy of the Commercial Fisheries Research Foundation.

## Curry Watermelon Scup with Chili Lime Sauce

Submitted by: Charli Spiegel

**PREP TIME:** 30 mins **COOK TIME:** 25 mins

**SERVES:** 1



### MAIN INGREDIENTS:

- Olive oil
- Fresh garlic, minced
- Curry spice mixture (cumin, turmeric, salt, pepper)
- 1 ½ cup watercress
- 4 oz watermelon, cut into square slices
- ½ avocado, sliced
- 4 oz Porgy (Scup) fillet

### CHILI LIME SAUCE INGREDIENTS:

- Olive oil
- Fresh garlic, minced
- Fresh chili pepper, deseeded, minced
- ½ cup lime juice
- ¼ cup white wine
- ¼ cup hot sauce
- ½ cup heavy cream
- Slurry (equal parts cornstarch and water)

### DIRECTIONS:

Heat up sauté pan to medium heat. Season fish with curry mixture. Add oil to pan then add garlic until tender. In same pan add porgy fillet, cook for 2 minutes each side. Remove fish to another sauté pan, heat on low heat to remain warm. In 1<sup>st</sup> pan add watercress, cook for 1 ½ minutes, constantly stirring. Move watercress to pan with fish. Sear watermelon on high heat in 1<sup>st</sup> pan for about 10 seconds each side. Plate in order - watercress, watermelon, sliced avocado, and Porgy with Chili Lime Sauce over top.

To prepare sauce: Heat up sauté pan to medium heat. Add oil to pan, then sauté garlic and chili peppers until tender. Deglaze with lime juice and white wine, let reduce for 2-3 minutes, then add hot sauce and whisk. Next add heavy cream and whisk fast to prevent breaking. Slowly mix in a little slurry until sauce reaches desired consistency.

Recipe provided courtesy of the Commercial Fisheries Research Foundation.

# Asian-Style Scup Fish Cakes

Submitted by: Briana Fleming

**PREP TIME:** 30 mins

**COOK TIME:** 30 mins **SERVES:** 3



## MAIN INGREDIENTS:

6 Scup fillets  
½ teaspoon ground coriander  
½ teaspoon chili powder  
3 large eggs  
3 cups Panko bread crumbs  
1 cup flour  
½ cup red bell pepper, diced  
1 ½ Serrano pepper, diced, to taste  
1 shallot, diced  
½ cup water chestnuts, diced  
½ cup fresh cilantro, chopped  
¼ cup chives or green onion  
1 ginger slice  
2 tablespoons Ponzu sauce  
3 limes  
3 tablespoons vegetable oil

## POACHING LIQUID INGREDIENTS:

32 oz fish or vegetable stock  
2 celery stalks, sliced widthwise  
1 white onion, chopped  
2 bay leaves  
½ Serrano pepper  
7 ginger slices  
5 garlic cloves, crushed

## PONZU SAUCE:

½ cup fresh lime juice  
1 tablespoon rice wine vinegar  
½ cup soy sauce  
1 tablespoon sweet rice wine  
1 tablespoon brown sugar  
1 teaspoon ginger, minced  
Pinch red pepper flakes

## DIRECTIONS:

Add poaching ingredients into a pot and simmer for 15 minutes. Season heavily with salt and add cilantro stems and remaining lime if desired.

Season fish fillets with coriander, chili powder, and salt & pepper. Set aside. Mix together panko and 1 egg to create binding agent for the cakes.

In separate bowl combine peppers, shallots, onions, water chestnuts, lime juice, cilantro, ginger and ponzu sauce. Set aside in fridge.

Poach fish in stock for 5-8 minutes. Cool in fridge. Once fish is cool, add panko/egg mixture to vegetable mix, then gently fold in fish and form cakes. Let rest in freezer for 10 minutes.

In order, dredge cakes in flour, beaten eggs, and panko crumbs. Fry 4 minutes on each side in vegetable oil.

Serve with sauce and lime zest.

Recipe provided courtesy of the Commercial Fisheries Research Foundation.



## Southern Fried Scup with Tangy Malt Sauce

Submitted by: LaSenda Smith

**PREP TIME:** 15 mins

**COOK TIME:** 20 mins **SERVES:** 2



### MAIN INGREDIENTS:

4 cups cooking oil  
1 cup flour  
1 cup fine corn meal  
2 tablespoons salt and pepper  
¼ cup Tony Chachere's Cajun creole seasoning  
2 eggs  
2 cups buttermilk  
1 lb Scup (Porgie) cut into small fillets or strips

### MALT SAUCE INGREDIENTS:

¼ cup mayonnaise  
1 tablespoon Worcestershire sauce  
¼ cup catchup  
1 teaspoon Tony Chachere's Cajun creole seasoning  
4 tablespoons malt vinegar  
¼ cup diced caramelized onions  
1 lemon wedge

### DIRECTIONS:

Place oil in skillet and heat on medium. In a medium bowl place flour, cornmeal, Tony seasoning, salt and pepper. Stir the seasoning mix into the flour, taste, if desire add more. In another bowl, crack eggs and whip in buttermilk. Dredge fillets through milk and eggs then roll in flour cornmeal mixture. Place fillets in hot oil until desired browning (doneness).

To prepare sauce – combine ingredients in medium bowl and chill until serving fish.

Recipe provided courtesy of the Commercial Fisheries Research Foundation.



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## Curry Watermelon Scup with a Chili Lime Sauce

### MAIN INGREDIENTS:

- Olive oil
- Fresh garlic, minced
- Curry spice mixture (cumin, turmeric, salt, pepper)
- 1 ½ cup watercress
- 4 oz watermelon, cut into square slice
- ½ avocado, sliced
- 4 oz Porgy (Scup) fillet

### CHILI LIME SAUCE INGREDIENTS:

- Olive oil
- Fresh garlic, minced
- Fresh chili pepper deseeded, minced
- ½ cup lime juice
- ¼ cup white wine
- ¼ cup hot sauce
- ½ cup heavy cream
- Slurry (equal parts cornstarch and water)

### DIRECTIONS:

Heat up sauté pan to medium heat. Season fish with curry mixture. Add oil to pan then add garlic until tender. In same pan add porgy fillet, cook for 2 minutes each side. Remove fish to other sauté pan on low heat to remain warm. In 1<sup>st</sup> pan add watercress, cook for 1 ½ minutes, constantly stirring. Move watercress to pan with fish. Sear watermelon on high heat in 1<sup>st</sup> pan for about 10 seconds each side. Plate in order - watercress, watermelon, sliced avocado, and Porgy with Chili Lime Sauce over top.

To prepare sauce – heat up sauté pan to medium heat. Add oil to pan, then sauté garlic and peppers until tender. Deglaze with lime juice and white wine, let reduce for 2-3 minutes, then add hot sauce and whisk. Next add heavy cream and whisk fast to prevent breaking. Slowly mix in a little slurry until sauce reaches desired consistency.



## SCUP RECIPE

### Curry Watermelon Scup with Chili Lime Sauce

FROM: Chef Charli Spiegel

PREP TIME: 30 mins COOK TIME: 25 mins  
SERVES: 1



Recipe provided courtesy of the Commercial Fisheries Research Foundation.

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## SCUP RECIPE

### Southern Fried Scup with Tangy Malt Sauce

FROM: Chef LaSenda Smith

PREP TIME: 15 mins COOK TIME: 20 mins  
SERVES: 2



Recipe provided courtesy of the Commercial Fisheries Research Foundation.

[www.cfrfoundation.org](http://www.cfrfoundation.org)

### Southern Fried Scup with Tangy Malt Sauce

#### MAIN INGREDIENTS:

- 4 cups cooking oil
- 1 cup flour
- 1 cup fine corn meal
- 2 tablespoons salt and pepper
- ¼ cup Tony Chachere's Cajun creole seasoning
- 2 eggs
- 2 cups buttermilk
- 1 lb Scup (Porgie) cut into small fillets or strips

#### MALT SAUCE INGREDIENTS:

- ¼ cup mayonnaise
- 1 tablespoon Worcestershire sauce
- ¼ cup catchup
- 1 teaspoon Tony Chachere's Cajun creole seasoning
- 4 tablespoons malt vinegar
- ¼ cup diced caramelized onions
- 1 lemon wedge

#### DIRECTIONS:

Place oil in skillet and heat on medium. In a medium bowl place flour, corn meal, Tony seasoning, salt and pepper. Stir the seasoning mix in the flour, taste, if desire add more. In another bowl, crack eggs and whip in milk. Dredge fillets through milk and eggs then roll in flour corn meal mixture. Place fillets in hot oil until desired browning (doneness).

To prepare sauce – combine ingredients in medium bowl and chill until serving fish.

## Scup Curry

### INGREDIENTS:

- 1 medium onion
- 4 cloves garlic
- ½ red bell pepper
- 4 tablespoons butter
- ¼ cup curry powder
- 1 tablespoon kosher salt
- ½ tablespoon ground black pepper
- ½ cup coconut milk
- ½ tablespoon tomato paste
- 1 cap lemon juice
- 1 cap vinegar
- 8 pieces Scup fillets

### DIRECTIONS:

Marinate Scup fillets in a bowl with lemon juice, vinegar, salt and pepper. In a small bowl, mix curry powder with coconut milk. Puree onion, garlic and bell pepper. In a medium sauce pan, melt butter on low heat. Add puree to melted butter. Cook covered for about 15 minutes (stir occasionally). Add tomato paste and blend. Mix in the curry coconut milk mixture. Let simmer 15 minutes. Season to taste with pepper and salt.

Add Scup fillets gently on top of simmering mixture. Do not stir. Simmer on low for about 8 minutes or until cooked.



## SCUP RECIPE

### Scup Curry

FROM: Chef Mariama Jallow

PREP TIME: 20 mins COOK TIME: 40 mins  
SERVES: 4



Recipe provided courtesy of the Commercial Fisheries Research Foundation.

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## SCUP RECIPE

### Grilled Scup Tacos

FROM: Chef Amber Baden

PREP TIME: 15 mins COOK TIME: 10 mins  
SERVES: 4



Recipe provided courtesy of the Commercial Fisheries Research Foundation.

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## Grilled Scup Tacos

### INGREDIENTS:

- 8 corn tortillas
- 4 scup fillets (boneless, skinless)
- 2 tablespoons extra virgin olive oil
- 2 teaspoons garlic, minced
- 3 and ½ teaspoons ground cumin
- 4 limes (juice of)
- 1 teaspoon salt & pepper, each
- 3 cups shredded red cabbage
- ½ cup red wine vinegar
- 2 tablespoons sugar
- 1 teaspoon salt
- 1 fresh pineapple, cored, ½ " strips
- 1 red and yellow bell pepper, each
- 1 jalapeno
- 1 red onion, diced
- 2 tablespoons chopped fresh cilantro
- 1 teaspoon salt
- ½ teaspoon black pepper
- 2 avocados
- 1 cup sour cream
- 1-2 tablespoons Sriracha
- ½ teaspoon garlic powder

### DIRECTIONS:

Mix olive oil, minced garlic, 3 t cumin, juice 1 lime, 1 t salt and 1 t pepper. Coat on fish in a bowl and cover tightly. Set aside in refrigerator until needed.

Pickled cabbage: mix red wine vinegar, sugar, and salt together, pour over cabbage in a bowl. Cover tightly and set aside until needed.

Pineapple Salsa: lightly drizzle olive oil on peppers and jalapeno. Grill with pineapple strips until caramelized. When cool, dice all. Mix gently with onion, cilantro, juice 2 limes, salt and pepper. Reserve in refrigerator until needed.

Blend avocados, sour cream, Sriracha, juice 1 lime, cumin, garlic powder and salt until reaches a smooth consistency. Grill fish on preheated, oiled grill for about 5 minutes on each side. Grill tortillas. Assemble tacos with fish, cabbage, salsa and avocado crema.

## Asian-Style Scup Fish Cakes

### MAIN INGREDIENTS:

- 6 Scup fillets
- ½ teaspoon ground coriander
- ½ teaspoon chili powder
- 3 large eggs
- 3 cups Panko bread crumbs
- 1 cup flour
- ½ cup red bell pepper, diced
- 1 ½ Serrano pepper, diced, to taste
- 1 shallot, diced
- ½ cup water chestnuts, diced
- ½ cup fresh cilantro, chopped
- ¼ cup chives or green onion
- 1 ginger slice
- 2 tablespoons Ponzu sauce
- 3 limes

### DIRECTIONS:

Simmer poaching ingredients in a pot for 15 minutes. Season fillets with coriander, chili powder, and salt & pepper. Set aside. Mix together panko and 1 egg. In separate bowl combine peppers, shallots, onions, water chestnuts, lime juice, cilantro, ginger and ponzu sauce. Set aside in fridge. Poach fish in stock for 5-8 minutes. Cool in fridge. Once fish is cool, add panko/egg mixture to vegetable mix, then gently fold in fish and form cakes. Let rest in freezer for 10 minutes. Dredge cakes in flour, beaten eggs, then panko crumbs. Fry 4 minutes on each side in vegetable oil. Serve with sauce and lime zest.

### POACHING LIQUID INGREDIENTS:

- 32 oz fish or vegetable stock
- 2 celery stalks, sliced widthwise
- 1 white onion, chopped
- 2 bay leaves
- ½ Serrano pepper
- 7 ginger slices
- 5 garlic cloves, crushed

### PONZU SAUCE:

- ½ cup fresh lime juice
- 1 tablespoon rice wine vinegar
- ½ cup soy sauce
- 1 tablespoon sweet rice wine
- 1 tablespoon brown sugar
- 1 teaspoon ginger, minced
- Pinch red pepper flakes



## SCUP RECIPE

### Asian-Style Scup Fish Cakes

**FROM:** Chef Brieana Fleming

**PREP TIME:** 30 mins **COOK TIME:** 30 mins

**SERVES:** 3



Recipe provided courtesy of the Commercial Fisheries Research Foundation.

[www.cfrfoundation.org](http://www.cfrfoundation.org)

## SCUP RECIPE

### Asian-Style Scup Fish Cakes



**FROM:** Chef Brieana Fleming

**PREP TIME:** 30 mins **COOK TIME:** 30 mins

**SERVES:** 3



Recipe provided courtesy of the Commercial Fisheries Research Foundation.

[www.cfrfoundation.org](http://www.cfrfoundation.org)

## Asian-Style Scup Fish Cakes

### MAIN INGREDIENTS:

- 6 Scup fillets
- ½ teaspoon ground coriander
- ½ teaspoon chili powder
- 3 large eggs
- 3 cups Panko bread crumbs
- 1 cup flour
- ½ cup red bell pepper, diced
- 1 ½ Serrano pepper, diced, to taste
- 1 shallot, diced
- ½ cup water chestnuts, diced
- ½ cup fresh cilantro, chopped
- ¼ cup chives or green onion
- 1 ginger slice
- 2 tablespoons Ponzu sauce
- 3 limes

### DIRECTIONS:

Simmer poaching ingredients in a pot for 15 minutes. Season fillets with coriander, chili powder, and salt & pepper. Set aside. Mix together panko and 1 egg. In separate bowl combine peppers, shallots, onions, water chestnuts, lime juice, cilantro, ginger and ponzu sauce. Set aside in fridge. Poach fish in stock for 5-8 minutes. Cool in fridge. Once fish is cool, add panko/egg mixture to vegetable mix, then gently fold in fish and form cakes. Let rest in freezer for 10 minutes. Dredge cakes in flour, beaten eggs, then panko crumbs. Fry 4 minutes on each side in vegetable oil. Serve with sauce and lime zest.

### POACHING LIQUID INGREDIENTS:

- 32 oz fish or vegetable stock
- 2 celery stalks, sliced widthwise
- 1 white onion, chopped
- 2 bay leaves
- ½ Serrano pepper
- 7 ginger slices
- 5 garlic cloves, crushed

### PONZU SAUCE:

- ½ cup fresh lime juice
- 1 tablespoon rice wine vinegar
- ½ cup soy sauce
- 1 tablespoon sweet rice wine
- 1 tablespoon brown sugar
- 1 teaspoon ginger, minced
- Pinch red pepper flakes



# JWU Student Cook-Off

*sponsored by the Commercial Fisheries Research Foundation (CFRF)*

**Who:** YOU

**What:** A competition to develop a recipe featuring scup (i.e. porgy) and a contemporary sauce that can be easily replicated by home cooks.

**Where:** JWU, Harborside Campus

**When:** Recipes due to CFRF by April 22<sup>nd</sup>. Five finalists will be selected to compete in a cook-off on May 6<sup>th</sup>.

**Why:** Help promote a local, sustainable seafood product and support the RI fishing industry.



## How to Sign up:

1. Send your recipe to [amalek@cfrfoundation.org](mailto:amalek@cfrfoundation.org) by Friday, April 22<sup>nd</sup>.
2. The CFRF will review recipes and select the top five finalists to participate in a head-to-head cook-off.
3. Finalists will cook their dish for a panel of fishermen, chefs, and seafood purveyors on Friday, May 6<sup>th</sup>.

## Prizes:

**First Place:** Dish featured during a public tasting event at Dave's Marketplace

**Runners Up:** Recipes distributed to seafood markets throughout RI and various kitchen swag



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*Challenge: To create a dish using an underutilized species (Scup i.e. Porgy) and a contemporary sauce that can easily be prepared by the home cook*

We will be judging on 3 main criteria to see if your recipes will make the cut: flavor, marketability, and adaptability. You will also be judged on professionalism in the kitchen and overall sanitation. You will have 1 ½ hours to prep and prepare your dish.

*Flavor:* The overall flavor of your dish will ultimately determine if people like it. We are looking for a dish that brings balanced and natural seasonings to attract the most customers.

*Marketability:* Will your dish fly off the shelves? Does it sound appetizing? Describing your dish with well-known flavors and ingredients will help “distract” people from the fact that they don’t know the fish.

*Adaptability:* Once you sell the customer the product, how easy is it for them to recreate your vision in their own kitchen. Basically, does the recipe work? We have all been subject to faulty recipes, so make yours deliver a quality product.

Student Name: \_\_\_\_\_

Completed on Time: Yes: \_\_ No: \_\_

*10 = good*

*5 = OK*

*1 = Not so good*

**Flavor:**

10    9    8    7    6    5    4    3    2    1    Comments:

**Marketability:**

10    9    8    7    6    5    4    3    2    1    Comments:

**Adaptability:**

10    9    8    7    6    5    4    3    2    1    Comments:

**Professionalism:**

10    9    8    7    6    5    4    3    2    1    Comments:

**Sanitation:**

10    9    8    7    6    5    4    3    2    1    Comments:



## Rhode Island Seafood Chef's Table

July 21<sup>st</sup>, 2016



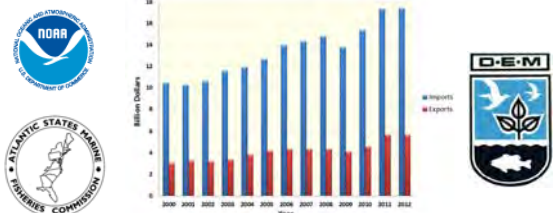
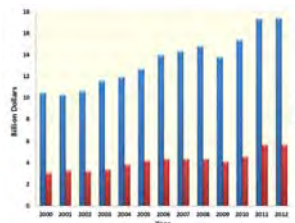
### CFRF Mission

*Develop and conduct research and outreach that assists in the achievement of sustainable fisheries for the benefit of individuals and businesses dependent on commercial fishing, consumers of seafood, and the public good.*



### Seafood in the USA

- US fisheries are among the most sustainable in the world due to rigorous management practices, BUT
  - 84%** of seafood consumed in the USA is **imported**
  - 63%** of domestically harvested seafood is **exported**

Year	Imports (Billions Dollars)	Exports (Billions Dollars)
2007	10.5	2.5
2008	10.5	2.5
2009	11.0	2.5
2010	11.5	2.5
2011	12.0	2.5
2012	12.5	2.5

### Sustainable Seafood: What to Look For

- 1) USA wild caught
- 2) Local
- 3) Seasonal
- 4) Low on Food Chain
- 5) MSC certified



### The Chef's Role in Supporting a Sustainable Seafood System



**Local Fishermen** → **Chefs** → **Consumers**

### The Chef's Role in Supporting a Sustainable Seafood System



- Support the local economy
- Encourage sustainable eating habits
- Provide the highest quality food to consumers
- Help conserve the environment for future generations



### American Eel (*Anguilla rostrata*)

**Distribution:**

- North Atlantic

**Seasonality in RI:**

- May - November

**Minimum Size:**

- 9 inches

**Role in Food Web:**

- Bottom-feeding omnivore



**Age at Harvest:**

- >4.5 years

**Fishing Gear:** Fish pot/trap




### American Eel (*Anguilla rostrata*)

**Taste:** Sweet

**Color:** Off-white

**Texture:** Fatty, soft

**Nutrition:**  
Good source of protein, vitamins and calcium

### Atlantic Longfin Squid (*Doryteuthis pealeii*)

**Distribution:**

- Massachusetts to Virginia

**Seasonality in RI:**

- Year round

**Minimum Size:**

- None

**Role in Food Web:**

- Planktivore

**Age at Harvest:**

- >6 months

**Fishing Gear:** Trawl




### Atlantic Longfin Squid (*Doryteuthis pealeii*)




**Taste:** Mild, slightly sweet

**Color:** Opaque white

**Texture:** Firm

**Nutrition:**  
Good source of selenium, riboflavin and vitamin B12

### Black Sea Bass (*Centropristis striata*)

**Distribution:**

- Cape Cod to Florida

**Seasonality in RI:**

- Year around
- Peak: Jan-Feb, May, July, Nov

**Minimum Size:**

- 11 inches total length



**Role in Food Web:**

- Bottom-feeding predator



**Age at Harvest:**

- 1 year of age

**Fishing Gear:** All

### Black Sea Bass (*Centropristis striata*)

**Taste:** Mild, fresh, somewhat delicate

**Color:** Snow white when cooked

**Texture:** Tender but firm

**Nutrition:**  
Low fat, source of protein and magnesium



### Butterfish (*Peprilus triacanthus*)

**Distribution:**

- Maine to South Carolina

**Seasonality in RI:**

- Year round

**Minimum Size:**

- None



**Role in Food Web:**

- Planktivore



**Age at Harvest:**

- 1 year

**Fishing Gear:** Trawl

### Butterfish (*Peprilus triacanthus*)

**Taste:** Fatty, oily

**Color:** White

**Texture:** Firm, smooth

**Nutrition:**  
Good source of niacin, B6, phosphorus, vitamin B12, and selenium

### Jonah Crab (Rock Crab) (*Cancer borealis*)

**Distribution:**

- Nova Scotia to Cape Cod

**Seasonality in RI:**

- Year round
- Peak: Jan-May, Nov-Dec

**Minimum Size:**

- 4.75 inch



**Role in Food Web:**

- Bottom-feeding omnivore



**Age at Harvest:**

- Poorly described

**Fishing Gear:** Crab traps

### Jonah Crab (Rock Crab) (*Cancer borealis*)

**Taste:** Mild, sweet

**Color:** White

**Texture:** Flaky

**Nutrition:**  
Good source of vitamin B12, selenium, magnesium and phosphorus.

### Little/Winter Skate (*Leucoraja erinacea/ Leucoraja ocellata*)

**Distribution:**

- Maine to North Carolina

**Seasonality in RI:**

- Year round

**Minimum Size:**

- None

**Role in Food Web:**

- Bottom-feeding omnivore

**Age at Harvest:**

- 11-12 years

**Fishing Gear:** Gillnet, Trawl




### Little/Winter Skate (*Leucoraja erinacea/ Leucoraja ocellata*)




**Taste:** Mild, flavor similar to scallops

**Color:** Off-white

**Texture:** Firm and stringy (striated wings)

**Nutrition:** Low in sodium and fat

### Monkfish (Goosefish)

*(Lophius americanus)*

**Distribution:**

- Maine to North Carolina

**Seasonality in RI:**

- Year round
- Peak: Jan-July, Oct-Dec

**Minimum Size:**

- >17 inches (11 inch tail)

**Role in Food Web:**

- Bottom-feeding predator

**Age at Harvest:**


- 1-2 years

**Fishing Gear:** Gillnet, Trawl




### Monkfish (Goosefish)

*(Lophius americanus)*



**Taste:** Mild, slightly sweet

**Color:** White

**Texture:** Tail meat is firm and dense

**Nutrition:**  
Good source of niacin, vitamins B6 and B12, potassium, phosphorus, selenium



### Quahog (Hard Clam)

*(Mercenaria mercenaria)*

**Distribution:**

- Cape Cod to New Jersey

**Seasonality in RI:**

- Year round

**Minimum Size:**

- 1 inch (hinge width)



**Role in Food Web:**

- Planktivore

**Age at Harvest:**


- Age 2

**Fishing Gear:** Bull rake

### Quahog (Hard Clam)

*(Mercenaria mercenaria)*




**Taste:** Flavorful, salty

**Color:** Pinkish

**Texture:** Firm

**Nutrition:**  
Low fat, selenium, zinc, iron, magnesium, B vitamins



### Scup (Porgy)

*(Stenotomus chrysops)*

**Distribution:**

- Massachusetts to South Carolina

**Seasonality in RI:**

- Year round
- Peak: April - June

**Minimum Size:**

- 9 inches



**Role in Food Web:**

- Bottom-feeding omnivore

**Age at Harvest:**

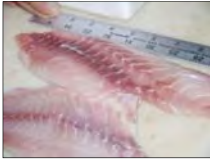
- 3 years

**Fishing Gear:** Trawl

### Scup (Porgy)

*(Stenotomus chrysops)*




**Taste:** Mild

**Color:** White

**Texture:** Lean and flaky

**Nutrition:**  
Low sodium, high in niacin, phosphorus, vitamins B6 and B12, and selenium



### Silver Hake (Whiting)

*(Merluccius bilinearis)*

**Distribution:**

- Maine to South Carolina

**Seasonality in RI:**

- Year round
- Peak: April–May, July–Nov

**Minimum Size:**

- None

**Role in Food Web:**

- Omnivorous predator

**Age at Harvest:**


- 2–3 years

**Fishing Gear:** Trawl




### Silver Hake (Whiting)

*(Merluccius bilinearis)*




**Taste:** Mild and slightly sweet

**Color:** White, off-white

**Texture:** Softer flesh, less flaky

**Nutrition:**  
Good source of selenium, vitamin B, magnesium and protein



### Spiny Dogfish

*(Squalus acanthias)*

**Distribution:**

- Maine to North Carolina

**Seasonality in RI:**

- Year round

**Minimum Size:**

- None (lb. limit/day)



**Role in Food Web:**

- Omnivorous predator

**Age at Harvest:**


- Females: ~age 12
- Males: ~age 6

**Fishing Gear:** Gillnet, trawl, longline

### Spiny Dogfish

*(Squalus acanthias)*




**Taste:** Mild and sweet

**Color:** White when cooked

**Texture:** Flaky but firm

**Nutrition:**  
High in selenium, and vitamins B6 and B12



### Striped Sea Robin

*(Prionotus evolans)*

**Distribution:**

- Maine to Florida

**Seasonality in RI:**

- May to October

**Minimum Size:**

- None



**Role in Food Web:**

- Bottom-feeding omnivore

**Age at Harvest:**


- 2 years

**Fishing Gear:** Trawl, Rod & Reel

### Striped Sea Robin

*(Prionotus evolans)*




**Taste:** Mild, sweet flavor

**Color:** White

**Texture:** Firm, slightly flaky

**Nutrition:** Rich in Vitamin B12 and niacin



### Summer Flounder (Fluke)

*(Paralichthys dentatus)*

**Distribution:**

- Massachusetts to North Carolina

**Seasonality in RI:**

- Year round
- Peak: Feb–Aug, Nov–Dec

**Minimum Size:**

- 14 inches



**Role in Food Web:**

- Omnivorous predator

**Age at Harvest:**



- 2–3 years

**Fishing Gear:** Trawl

### Summer Flounder (Fluke)

*(Paralichthys dentatus)*

**Taste:** Delicate flavor

**Color:** White

**Texture:** Flaky and fine

**Nutrition:**  
Good source of B vitamins and niacin

### Tautog (Blackfish)

*(Tautoga onitis)*

**Distribution:**

- Cape Cod to Chesapeake Bay

**Seasonality in RI:**

- Year round
- Peak: April–May, October–November

**Minimum Size:**

- 16 inches



**Role in Food Web:**

- Bottom-feeding omnivore

**Age at Harvest:**



- 3–4 years

**Fishing Gear:** Rod & Reel, Trawl, Fish pots/traps

### Tautog (Blackfish)

*(Tautoga onitis)*

**Taste:** Delicate, sweet

**Color:** White

**Texture:** Firm, dry

**Nutrition:**  
Good source of vitamin A, phosphorus, calcium, and iron

### Channeled Whelk (Conch)

*(Busycotypus canaliculatus)*

**Distribution:**

- Cape Cod to Florida

**Seasonality in RI:**

- Year round
- Peak: May–December

**Minimum Size:**

- 2.75 inches in diameter
- 4.75 inches in length



**Role in Food Web:**

- Predatory snail

**Age at Harvest:**



- 8–10 years

**Fishing Gear:** Conch traps

### Channeled Whelk (Conch)

*(Busycotypus canaliculatus)*

**Taste:** Mild

**Color:** Light pink

**Texture:** Chewy, firm like clams

**Nutrition:**  
Good source of protein, iron and omega 3





# COMMERCIAL FISHERIES RESEARCH FOUNDATION

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	Distribution	Seasonality in RI	Minimum Size	Role in Food Web	Age at Harvest	Fishing Gear	Taste	Color	Texture
<b>American Eel</b> ( <i>Anguilla rostrata</i> )	North Atlantic	May- November	9 in.	Bottom- feeding omnivore	> 4.5 years	Fish pots/traps	Sweet	Off-white	Fatty, soft
<b>Atlantic Longfin Squid</b> ( <i>Doryteuthis pealeii</i> )	Massachusetts to Virginia	Year round	None	Planktivore	> 6 months	Trawl	Mild, slightly sweet	Opaque white	Firm
<b>Black Sea Bass</b> ( <i>Centropristis striata</i> )	Cape Cod to Florida	Year round Peak: Jan-Feb, May, July, Nov	11 in.	Bottom- feeding predator	> 1 year	All	Mild, fresh, delicate	Snow white	Tender but firm
<b>Butterfish</b> ( <i>Peprilis triacanthus</i> )	Maine to South Carolina	Year round	None	Planktivore	> 1 year	Trawl	Fatty, oily	White	Firm, smooth
<b>Jonah Crab (Rock Crab)</b> ( <i>Cancer borealis</i> )	Nova Scotia to Cape Cod	Year round Peak: Jan- May, Nov-Dec	4.75 in.	Bottom- feeding omnivore	Poorly described	Crab traps	Mild, sweet	White	Flaky
<b>Little/Winter Skate</b> ( <i>Leucoraja erinacea/ocellata</i> )	Maine to North Carolina	Year round	None	Bottom- feeding omnivore	> 11 years	Gillnet, Trawl	Mild, similar to scallops	Off-white	Firm and stringy
<b>Monkfish</b> ( <i>Lophius americanus</i> )	Maine to North Carolina	Year round Peak: Jan- July, Oct-Dec	17 in. (11 in. tail)	Bottom- feeding predator	> 1 year	Gillnet, Trawl	Mild	White	Firm, dense
<b>Quahog (Hard Clam)</b> ( <i>Mercenaria mercenaria</i> )	Cape Cod to New Jersey	Year round	1 in. hinge width	Planktivore	> 2 years	Bull rake	Malty	Pinkish	Firm



**COMMERCIAL FISHERIES**  
RESEARCH FOUNDATION

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	Distribution	Seasonality in RI	Minimum Size	Role in Food Web	Age at Harvest	Fishing Gear	Taste	Color	Texture
<b>Scup (Porgy)</b> ( <i>Stenotomus chrysops</i> )	Massachusetts to South Carolina	Year round Peak: April-June	9 in.	Bottom-feeding omnivore	> 3 years	Trawl	Mild	White	Lean and flaky
<b>Silver Hake (Whiting)</b> ( <i>Merluccius bilinearis</i> )	Maine to South Carolina	Year round Peak: April-May, July-Nov	None	Omnivorous predator	> 2 years	Trawl	Mild, slightly sweet	White, off-white	Softer, less flaky
<b>Spiny Dogfish</b> ( <i>Squalus acanthias</i> )	Maine to North Carolina	Year round	None	Omnivorous predator	Females: > 12 years Males: > 6 years	Gillnet, Trawl, Longline	Mild and sweet	White	Flaky but firm
<b>Striped Sea Robin</b> ( <i>Prionotus evolans</i> )	Maine to Florida	Year round Peak: May-Oct	None	Bottom-feeding omnivore	> 2 years	Trawl, Rod & Reel	Mild and sweet	White	Firm, slightly flaky
<b>Summer Flounder (Fluke)</b> ( <i>Paralichthys dentatus</i> )	Massachusetts to North Carolina	Year round Peak: Feb-Aug, Nov-Dec	14 in.	Omnivorous predator	> 2 years	Trawl	Mild and delicate	White	Flaky and fine
<b>Tautog (Blackfish)</b> ( <i>Tautoga onitis</i> )	Cape Cod to Chesapeake Bay	Year round Peak: April-May, Oct-Nov	16 in.	Bottom-feeding omnivore	> 3 years	Rod & Reel, Trawl, Fish pots/traps	Delicate and sweet	Off-white	Firm and dry
<b>Whelk (Conch)</b> ( <i>Busycotypus canaliculatus</i> )	Cape Cod to Florida	Year round Peak: May-Dec	2.75 in. diameter or 4.75 in. length	Predatory snail	> 8 years	Whelk traps	Mild	Light pink	Chewy, firm

# Scup (aka Porgy)

*A locally abundant, underutilized fish*



Single serving, white-flesh fillets with tender texture and a mild taste!

To learn more about this local, delicious species and for additional recipes, go to [www.cfrfoundation.org/scup-marketing](http://www.cfrfoundation.org/scup-marketing).

Try Scup today and support Rhode Island's local fishermen.



## AN EMERGING MARKET

- Scup is an abundant and underutilized species.
- Traditionally, scup has been consumed as a whole fish.
- Research by the CFRF has uncovered machinery which can effectively process scup, producing a boneless fillet.
- Scup is underutilized! Only 60% of allowed catch was landed in 2014!
- By buying scup, you help increase demand for this fish, helping your local RI commercial fishermen.

## HEALTH BENEFITS

In a four ounce fillet:

- 80% of Selenium RDA to help enhance immune system
- 70% of Vitamin B12 RDA to help decrease risk of heart disease and cancer
- Also a source of Niacin, Phosphorus, Vitamin B6 and Pantothenic Acid

RDA = Recommended Dietary Allowance

## THE BIOLOGY OF SCUP

Scientific Name: *Stenotomus chrysops*



Range: from Maine to North Carolina, but found primarily in Mid-Atlantic and Southern New England waters

Weight: usually 0.5-1.5 lbs, up to 4 lbs

Length: capable of growing up to 18 inches long

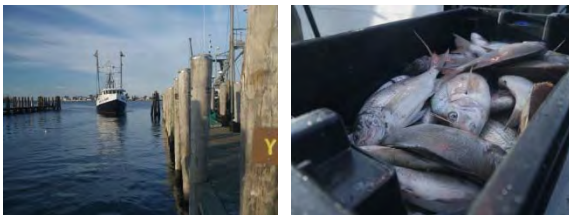
Migration: spend winter months in deep water and migrate to inshore waters during the summer

Stock Status: healthy with no overfishing occurring

*Available to RI fishermen year round!!*

## SUPPORT LOCAL, SUSTAINABLE SEAFOOD

- As much as 90% of the seafood consumed in the U.S. is imported into the country.
- Very little of these imports are inspected.
- Local sources of seafood can provide much fresher and healthier options.
- Point Judith, RI is the leading US port for scup.
- Buying local seafood products, like scup, supports the commercial fishing economy.
- Wild caught seafood harvested in RI is considered to be sustainably caught because of rigorous state and nationwide fishery management practices.
- Buying scup supports the local fishing community!
- Learn more about sustainable seafood options at <http://www.fishwatch.gov>.



## TRY THIS DELICIOUS SCUP RECIPE!

### Corn Crusted Scup

#### Ingredients:

- 4 cups buttermilk
- ¼ tsp. cayenne pepper
- Salt and pepper to taste
- ¼ tsp. celery seed
- ¼ tsp. nutmeg
- 2 pounds scup fillets
- 1 tbsp. fresh parsley, chopped
- ¼ cup cornmeal
- ¼ cup breadcrumbs
- Oil to fry

#### Directions:

In a large bowl, mix first 5 ingredients, stir to combine. Marinate scup fillets in mixture overnight or up to 24 hours.

Preheat oil to 365 degrees. In a shallow bowl, mix parsley, cornmeal and bread crumbs together. Stir to combine. Dredge scup fillets in mixture. Fry scup in oil until golden brown and heated through. Drain on a paper lined plate. Serve hot.

Recipe courtesy of Marvin Woods

**Thank you for buying local and  
sustainable seafood!**

This brochure was brought to you by:



*The Commercial Fisheries Research Foundation (CFRF) is a non-profit, private research foundation dedicated to conducting research that assists in the achievement of sustainable fisheries through the generation of better information and effective technologies. Its work is for the benefit of individuals and businesses dependent on commercial fishing, consumers of seafood, and the public good in the southern New England Region.*

*Check out our website for the latest news on scup and CFRF's other ongoing projects in RI at [www.cfrfoundation.org](http://www.cfrfoundation.org)*







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# Sea Robin Anyone? Chefs Get Acquainted With Local Seafood

By [KRISTIN GOURLAY \(/PEOPLE/KRISTIN-GOURLAY\)](/PEOPLE/KRISTIN-GOURLAY) • JUL 22, 2016

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*The humble sea robin sometimes gets thrown back, but chefs insist it's delicious.*

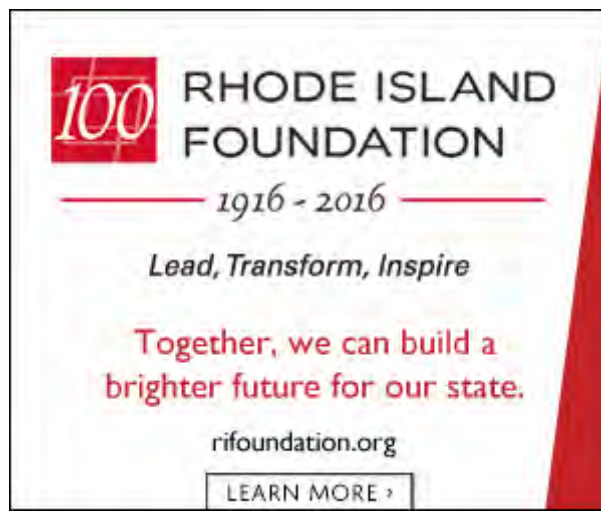
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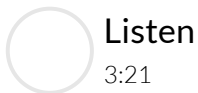
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Enriching Lives

Rhode Island's waters teem with tasty fish. But we're not eating most of them. That's partly because much of it gets shipped overseas, and partly because Rhode Islanders just haven't developed a taste for fish many consider trash – or "bycatch." A group of chefs, scientists, and fishermen want to change that.



We visited the kitchen at culinary business incubator Hope and Main in Warren to find out what's on the menu.



*Chefs get acquainted with local seafood.*

Trays full of strange looking fish and shellfish are glistening on ice in this sunny kitchen. Chefs from across Rhode Island arrive, ready to sample, and cook, after a short presentation.

"And here we have butterfish. This is a fish that's caught by trawl, often in conjunction with squid," said Commercial Fisheries Research Foundation head Anna Malek.

While these fish are abundant and local, Malek and others believe they're going to waste. With a little education, she hopes chefs will help create a market for these underutilized species.

"We also have skate wings, we have quahogs that were caught throughout Narragansett Bay," said Malek. "We have long fin squid – so this is our state appetizer here, calamari; these are whelk, or conch; these guys a little bit bigger, these are scup. These guys are sea robin. So this is another common trash fish species."

As the chefs gather, Johnson and Wales University instructor Matt Britt explains the plan.

"The main goal today is to use either underutilized or local Rhode Island fish, and some of this stuff here we've seen before," said Britt. "Some of it you know what it is but you haven't worked with it."

The chefs tie on aprons and pick their fish. Chef Matt Gennuso from Chez Pascal in Providence lifts a giant conger eel out of its ice bath. He hasn't worked with this species before.

"I found it tricky to filet. So one idea I had to was to cook it a salt crust," Geunnuso said. "So it's basically steaming inside the salt crust, then you crack the crust, and I'm thinking you'll be able to pull the skin off and flake the meat."

Chef Ben Mayhew, from Garde de la Mer, has chosen sea robin. It's a white fish with spiny fins like wings.

"I used to catch sea robin when I went fishing with my stepfather," Mayhew mused. "And we used to throw it back, because they're a hideous looking fish."

While he guts the fish, Mayhew says he wants to keep his dish simple.

"I think I'm going to grill some filets, try the meat, very basic."

Chef Joe Simone from Simone's in Warren gravitates toward the squid. He decides to try an Italian dish called squid, or calamari, in zamino.

"I have some mushrooms and garlic and tomato," said Simone "I'm going to stew them in a pan, then I'm going to add the fresh calamari that I'm going to clean while the vegetables are cooking, and then stew it all together with a little wine and a little chili. Does that sound good?"

Yes, yes it does.

Over on the stove, chef Andrew Keintz from North Bakery in Providence is gently boiling some whelks and quahogs, waiting for them to steam open. For the non-native, a quahog is a clam, and a whelk is like a conch.

"I've never worked with these. So it's more of an experiment for me to see what potential lies there for us," said Keintz.

He and his partner decide to slice the whelks thin – that way they don't have to be tenderized – and dress them in citrus.

So can home gourmets find these fish in the local supermarket? Not so much. And that's another issue the Commercial Fisheries Research Foundation is trying to address. The hope is that more of what's caught in Rhode Island gets eaten here, too.







**TAGS:** [LOCAL SEAFOOD \(/TERM/LOCAL-SEAFOOD\)](#)

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JOHNSON & WALES  
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## JWU News

# Bringing the Ocean State to Your Plate

by **JWUMedia**, on Jul 26, 2016 4:17:11 PM



7/26/16 | Last week, some of Rhode Island's finest chefs convened at food-business incubator Hope & Main in Warren, RI, to explore ways to better utilize plentiful but less popular seafood species.

The 9 chefs — including JWU alumni Derek Wagner '99 (Nicks on Broadway), Matt Varga '05 (Gracie's), Ben Mayhew '10 (front-of-house at Garde de la Mer) and Aaron Thorpe '01 (Cook & Dagger) — were given an hour and a half to sample, cook and experiment with new or relatively unfamiliar seafood.

The chefs were more than up to the challenge as they thoughtfully picked through the gleaming display of freshly-caught seafood, including butterfish, conger eel, fluke, sea robin, spiny dogfish, squid, skate and whelk (conch).

The end goal? To rehab the unfair reputation of these so-called “trash” or “bycatch” species, and expand their market here in the Ocean State.

“We’re looking to introduce — or re-introduce, in some cases — RI chefs to the amazing seasonal product at our disposal,” noted Anna Malek Mercer, the director of the [Commercial Fisheries Research Foundation](#) (CFRF), which co-hosted the event with JWU Providence’s [College of Culinary Arts](#). “Another goal is to connect fishermen with chefs, and foster collaboration between chefs.”

The CFRF shared a sobering statistic: While US fisheries are among the most sustainable in the world due to rigorous management practices, a shocking 84% of seafood consumed in the US is imported — and 63% of domestically harvested seafood is exported.

For Chef Bill Idell '89, College of Culinary Arts assistant dean, keeping more of Rhode Island's foods in the state is a major priority.

Idell has been instrumental in developing JWU’s [Wellness & Sustainability elective](#), which embeds multiple opportunities for culinary students to connect with local farmers, fishermen, chefs and purveyors. Educating and collaborating with chef-alumni and other members of the RI food community — including special events like this one — is a logical extension of that remit.





**THEY DON'T CALL IT THE OCEAN STATE FOR NOTHING. SCUP IN ITS NATURAL HABITAT (TOP). BUTTERFISH + SCUP (BOTTOM). MAP + LIVE SCUP BY ANDREA FELDMAN; BUTTERFISH BY CFRF.**

In Hope & Main's development kitchen, the chefs were hard at work prepping their dishes.

Matt Gennuso of Chez Pascal chose conger eel, a species he'd never worked with before. Eager to test out its properties, he decided to cook the eel 3 ways: Encased in a salt crust, as steaks (whole sections), and as fillets or strips.

Derek Wagner quickly began filleting scup, while North Bakery's Andrew Keintz experimented with whelk, which he hadn't worked with before. (He also teamed up with Cook & Dagger's Aaron Thorpe to create a marinated fluke and grilled fennel dish served in a quahog shell.)

JWU instructor Matthew Britt, who frequently works with Malek Mercer in his classroom, loved watching so many local chefs working together and swapping ideas.

"Chefs can be so heads-down, because it's easy to get lost in work," he explained. "This was a great opportunity for them to work with new product and stretch their skills. We can sometimes forget how important that is."

Britt hopes to collaborate on more events with the CFRF — particularly in the fall, when local seafood is especially abundant. "The CFRF has been so generous in donating amazing seafood that our students would never otherwise be able to work with."

All of the chefs who participated in the event have been given an open invitation to speak at JWU's Providence Campus. Stay tuned.

## THE DISHES

- › Rick Allaire, Metacom Kitchen: Dogfish escabeche
- › Alan Bagley, Bacaro: Butterfish escabeche
- › Matt Britt, JWU Providence: Maryland-style crab cakes
- › Matt Gennuso, Chez Pascal: Salt-crusted eel
- › Andy Kientz, North Bakery: Citrus whelk salad
- › Ben Mayhew '10, Garde De La Mer/private chef: Corn husk-steamed sea robin served with pineapple-pepper salsa
- › Joe Simone, Simone's: Calamari zamino
- › Aaron Thorpe '01, Cook & Dagger  
Andy Kientz: Marinated fluke and grilled fennel
- › Matthew Varga '05, Gracie's: Skate wing puttanesca
- › Derek Wagner '99, Nicks on Broadway: Scup roasted with mushrooms and capers

## RELATED READING

[Sea Robin, Anyone? Chefs Get Acquainted with Local Seafood](#) (RI NPR story by Kristin Gourlay)  
[2015 RI Seafood Challenge: What's Scup?](#)

[How Do You Cook with Rhode Island's Seasons? Ask North's James Mark.](#)

**TWO FINISHED DISHES: SCUP WITH CORN AND ZUCCHINI RIBBONS (LEFT) / SPINY DOGFISH WITH TOMATO AND BASIL (RIGHT). PHOTOS: CFRF**





**JOHNSON & WALES**  
UNIVERSITY

## **MEDIA ALERT**

### **RHODE ISLAND SEAFOOD TAKES CENTER PLATE** *JWU and Commercial Fisheries Research Foundation* *tap into local species for “Chef’s Table”*

PROVIDENCE, R.I. — July 1, 2016 — Some of Rhode Island’s finest chefs, including JWU alumni Derek Wagner of Nick’s on Broadway and Matt Varga of Gracie’s, Providence, will participate in “Chef’s Table: Rhode Island Seafood,” hosted by the Commercial Fisheries Research Foundation (CFRF) and Johnson & Wales University (JWU), on Thursday, July 21, 2016, from 11 a.m.-3 p.m. at Hope & Main in Warren, R.I.

The event will encourage chefs to continue their efforts to utilize lesser known seafood species that are landed in Rhode Island, including: butterfish, sea robin, and skate. Dogfish, eel, fluke, hake, Jonah crab, monkfish, quahogs, scup, squid, tautog, and whelk will also be on the menu.

Anna Malek Mercer, Ph.D., executive director, CFRF, and local fishermen will join the chefs for an interactive event that will include discussions, seafood prep, cooking, and tastings. She notes, “Chef’s Table will provide a venue for fishermen and chefs to explore ways to maintain a healthy seafood industry in the state, increase Rhode Islander’s awareness about their own natural resources, and enhance the use of local seafood on the menus of some of the state’s finest restaurants.”

#### **ABOUT JWU**

Founded in 1914, Johnson & Wales University is a private, nonprofit, accredited institution with more than 15,000 graduate, undergraduate and online students at its four campuses in Providence, R.I.; North Miami, Fla.; Denver, Colo.; and Charlotte, N.C. An innovative educational leader, the university offers degree programs in arts and sciences, business, culinary arts, design and engineering, education, health and wellness, hospitality, nutrition and physician assistant studies. Its unique model integrates arts and sciences and industry-focused education with work experience and leadership opportunities, inspiring students to achieve professional success and lifelong personal and intellectual growth. The university’s impact is global, with alumni from 123 countries pursuing careers worldwide. For more information, visit [www.jwu.edu](http://www.jwu.edu).

#### **ABOUT CFRF**

The Commercial Fisheries Research Foundation is a non-profit, private foundation dedicated to conducting research and outreach that assists in the achievement of sustainable fisheries through the generation of better information and effective technologies. Its work is for the benefit of individuals and businesses dependent on commercial fishing, consumers of seafood, and the public good.

The CFRF was founded in 2004 by a group of fishermen and others in the industry in order to establish an alternative process for supporting fisheries research that would be lead by members of the commercial fishing industry. Initially the Foundation’s work focused on supporting collaborative conservation gear engineering projects, specifically in the groundfish fishery. The aim was for fishermen and scientists to work together to develop new gear or modify existing gear to allow fishermen to fish more selectively for species in abundance while protecting those stocks in need of rebuilding. Since that time, the Foundation’s work has expanded to include research and outreach important to all fishing sectors (shellfish, lobster, finfish, etc.) based in the southern New England region.

END

#### **MEDIA CONTACT**

Miriam Weinstein/JWU/ 401-598-1157/[miriam.weinstein@jwu.edu](mailto:miriam.weinstein@jwu.edu)

8 Abbott Park Place, Providence, RI 02903

401-598-1000 [www.jwu.edu](http://www.jwu.edu)

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