

RUTGERS

New Jersey Agricultural
Experiment Station

Community Supported Agriculture: adding seafood to the recipe: A two year pilot project analysis

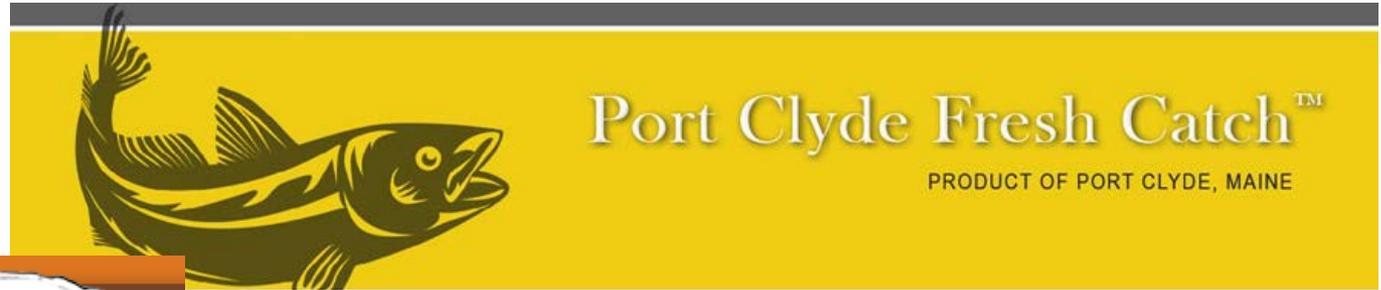
Gef Flimlin, Rutgers Cooperative Extension



What is Community Supported Agriculture?



Community Supported Fisheries



Infusing Seafood into CSAs

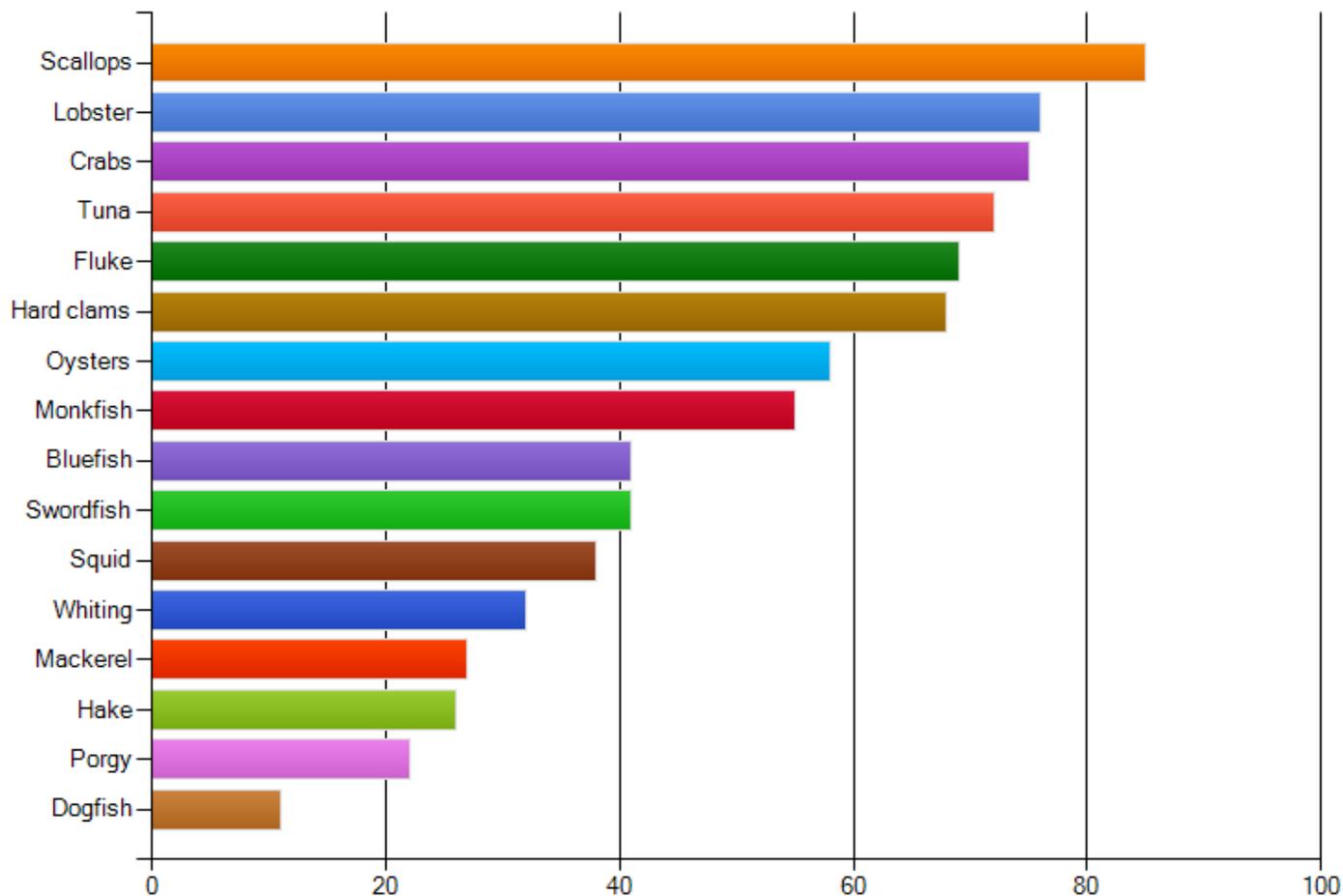


RUTGERS

New Jersey Agricultural
Experiment Station



Please indicate the types of seafood you would be interested in receiving (select all that apply).





- Biweekly, \$20/share in year 1; \$23 in year 2
- Some seafood providers deliver shares to farm, others must be picked up (by extension agent)

Share	Producer	Source
Littleneck Clams	Nautical Nuggets	Port Republic
Squid	Lund's Fisheries	Cape May
Cape May Salt Oysters	Atlantic Capes Fisheries	Cape May
Sea Scallops	Viking Village	Barnegat Light
Lobsters	Point Lobster Company	Point Pleasant
Middleneck Clams	Nautical Nuggets	Port Republic
Cultured Oysters	Parson's Seafood	Tuckerton
North Atlantic Swordfish	Viking Village	Barnegat Light
Wild Oysters	Maxwell's Shellfish	Port Republic
Chopped clams and chowder base	LaMonica Fine Foods	Millville

Species Information

Middleneck Clams

NAUTICAL NUGGETS

Nautical Nuggets
Rit Crema & Ray Crema
PO Box 314
Port Republic, NJ 08241-0314
Ph: 609-344-1677 | Alt: 609-652-8763
nauticalnuggets.com

Nautical Nuggets, owned and operated by Rit Crema and his son, Ray, and based in Port Republic, New Jersey, has been growing and selling clams (*Mercenaria mercenaria*, also known as the northern quahog) for over 30 years. The business was founded by Rit Crema and Rich Beckley, neig Garden State for over 30 years. After they noticed a rapid decline in populations of w Smithville section of Galloway Township, after they noticed a rapid decline in populations of w Crema and Beckley, along with Donny Feldisen of Galloway, visited the Virginia Institute of M (VIMS) laboratory to learn more about spawning hard clams. At that time, Dr. Mike Castagn Kraeuter ran the VIMS shellfish laboratory and developed innovative processes for hard clam a are widely used today. Dr. Kraeuter has been working with the Rutgers Haskin Shellfish Labo past 25 years, bringing with him expertise and experience that have been invaluable to the aquaculture industry in New Jersey.

Nautical Nuggets owns one of three hatcheries in Atlantic City and a land-based nursery syste also owned by other baymen and produce hard clams for planting in New Jersey's coastal bays.

The original Crema/Beckley facility was housed in a small bungalow in Venice Park until the relocated the business to an adjacent lot to open a hatchery. Rich Beckley joined the business in Brigantine, which was constructed shortly after.

The family business continues through Ray Crema, Rit's son, and George Mathis, a lifelong farmer, also the son of a bayman. At Nautical Nuggets, the staff spawns clams from broods that are used for breeding purposes) selected over the years from fast growing clams. The pr February of each year, when the clams are fed special algae, fattening the breeding stock to spawning. After 4 or 5 months, the young clams reach a field-plantable size of 8 to 15mm (inches).

Clam seed are planted on leases in the bay, under a predator control screen that keeps natu crabs and cownose rays, from eating the growing shellfish. Once the clams reach a markete after two to three years, they are harvested by hand with rakes and then sorted for sale to c

Clams from Nautical Nuggets are the quintessential local seafood product: raised business, arriving on your plate within 24 hours of being harvested.

For more information about the history of the clam industry in New Jersey a www.state.nj.us/seafood/Aquaculturereport.pdf

SPECIES INFORMATION

Hard clams are a type of bivalve (having a shell made up of two hinged val eastern shores of North America, from the northern Gulf of Mexico throu Canada. They are typically found in coastal bays and estuaries and prefer b found on a variety of different substrates. These animals are filter-feed Because clams are buried, they suck in water and expel waste using a siph out of the sand. Hard clams can live up to 40 years.

For more information about hard clams, visit: www.dnr.state.md.us/fishes

PROPER TRANSPORT AND STORAGE

Clam shares must be transported from the farm to your home in an insu packs. Seafood shares must be picked up last and always handled separa

Fresh clams can last several days if stored in a refrigerator at temperatu stored in melted ice water. Allowing shellfish to remain warm can ena risk of illness. Ensure they are not contaminated by other foods.

For detailed instructions on how to safely and properly transport and resource, which can be accessed online or picked up with your seafo

nsgd.gso.uri.edu/riu/riug10006.pdf

PREPARATION

For detailed instructions and photos describing how to properly prepare and open the clams, view the video at youtube.com/watch?v=sOCGBfuKaGo&feature=youtu.be

Middleneck clams are perfect for shucking or serving on the half shell either raw or cooked, as in Clams Casino. As an alternative to hand shucking, freezing clams also allows you to open clams for eating on the half shell or for further cooking in the oven. Put clams in the freezer for about six hours. Remove them from freezer and place in the sink, running lukewarm water over them. They should open slightly. Take a butter knife, slip it between the shells and turn, and the shells should pop open. Pull off the top shell and put the remaining shell with the frozen clam meat on a cookie sheet. The frozen clam meat also works perfectly them raw or continue with a recipe like those shown below. Clams Casino also works perfectly with chowder clams to be used in soups or sauces.

RECIPES

Clams Casino

Thatsnotwhattheresays.com

- 12 littleneck or middleneck clams (top shell dis
- 1 tbsp butter & 1 tbsp olive oil
- ¼ cup onion, finely chopped
- 2 tbsp red pepper, finely chopped
- 2 tbsp celery, finely chopped
- 2 cloves garlic, minced
- 1 piece soft oatmeal bread
- 2 tsp freshly grated parmesan cheese
- 2 tsp butter
- 2 slices of bacon, fried until ¾ done, then c

Open clams and place on baking sheet. Si tender over medium heat. Stir occasio clams. Break bread into pieces and pulv butter – pulse twice to blend. Add tea 400° for 10 minutes. Makes 2 servings.

Clams Steamed in Beer or Wine

Northeast Regional Aquaculture Center

- 2 dozen littleneck or middleneck clams
- 24 oz beer or wine
- 3 shallots, chopped
- 3 sprigs fresh parsley
- 3 sprigs fresh mint
- ¼ cup unsalted butter

Rinse the clams with cold water and scrub off any debris or mud clinging to the shell. In a large pan with cover, bring the beer or wine to a boil. Add shallots and herbs. Add clams, cover and steam until clams open, usually about 3 minutes. Shake the pan to encourage opening.

Remove clams and reduce liquid by half. Gradually stir in butter. Pour sauce over clams. Serve 12 clams per serving in a deep bowl accompanied with crusty bread for dipping.



RUTGERS

New Jersey Agricultural
Experiment Station



Shareholder Survey

- 95% Satisfied or Very Satisfied with **Overall Program**
- 99% Satisfied or Very Satisfied with **Quality**
- 82% Satisfied or Very Satisfied with **Value**
- 89% Satisfied or Very Satisfied with **Species Info**
- 94% Open to **repeats** of seafood
- 78% Satisfied with **Bi-weekly shares** (22% want weekly)

Shareholder comments

Overall, how satisfied or dissatisfied are you with the seafood shares program?

- I didn't sign up for the share every week but I have been **buying extra seafood when its available.**
- Still **excited** to learn what will come next.
- **Enjoyed** the program, just felt that the **quantity should be a bit more.**

How satisfied are you with the quality of the seafood shares?

- **Quality is excellent.**
- Squid were exceptionally cleaned, Oysters required excessive scrubbing for serving raw.
- **Nothing beats "fresh" seafood.** It's been great!!!
- fresh, fresh fresh! **Wow!!**
- Great, very fresh, except for the squid (frozen)

Shareholder comments

Please use the space for any additional comments you may have about the seafood shares program, including suggestions for improvement.

- This is basically a **wonderful idea**.
- I thought it was **well worth it**. I like getting it bi-weekly. The lobsters were awesome!
- Everything has been **fresh** and delicious.
- Some of the seafood **shares are small**. In the future, it should state how many it will feed. I have a family of three, and believed I would be able to feed them at least one dinner from the share. This was not the case each week
- I do **like the program**. I didn't sign up initially because I didn't have the money up front, (though I believe the **pricing is reasonable**), and during the summer I'm not always home on the weekend so I **did not want to be obligated**.
- Hoping for a **successful season so that continuation** will be certain.
- We have no suggestions. We are **very happy** with our share and would buy in weekly if available.
- I realize you may not have control over this, but **some finfish** earlier in the season might be nice.

Unanswered or continuing questions

- **Seafood Shares**

- Size
- Quality of share
- Frequency
- Variety
- Filleted/headed/gutted/whole
- Pricing
- “Prices are higher than I would typically pay but the quality is much higher also”
- “Felt that similar product could be acquired locally at lower prices”

Lower level issues

Information provided

- ✓ Nutritional information
- ✓ Flavor
- ✓ Consistency
- ✓ Recipes
- ✓ More in-depth instructions on prepping whole fish/demonstrations

Conceptual Issues

- ✓ Sustainable vs. local
- ✓ Seafood cooperative

Pickup logistics

Membership Options



Process evaluation

- Supplying seafood can be hindered by management schedules, bad weather, local availability of finfish.
- Delivery can sometimes be problematic.
- Possible development of a cookbook or a compilation of recipes from the shareholders
- Evaluate what extra shares delivered didn't sell.
- Is Saturday the best day to have the seafood share given out? Summer weekend travel may be an issue.
- Pricepoint of a weekly share needed to supply the seafood, leave a little buffer, and still get the CSA operator a 10% cut. Is this correct formula?

Process evaluation

- Could this seafood into CSAs be a separate business to deliver it to numerous CSAs and/or Food Coops?
- Feasibility plan out 3 years should be done.
- Seafood shares could continue after the CSAs' produce is done for the season. Seafood is harvested in the winter.
- Put the weekly seafood info on a RU or NJSG website to allow more than one CSA to have access to that info weekly.
- Need to continue discussion with the suppliers about the pros and cons of their participation in this process.

Process evaluation

- **The price paid for the shellfish was more than a wholesale price. This was good for the growers.**
- **Grower prices....\$.30/littleneck, \$.40/Middleneck, \$.70/ oyster.**
- Fish, scallops, and lobster purchased at a wholesale price.
- Need a total evaluation of the finances. After the 10% is taken off the top for the CSA, and the seafood cost is subtracted...does that leave enough to build a portion of a business on?
- If this wasn't a stand alone business of supplying CSAs, would it fit into a distribution pattern for a shellfish dealer?

Hidden advantage

The top of the page features a solid red background. In the upper left corner, the Rutgers University logo is displayed in white. The logo consists of the word "RUTGERS" in a large, serif font, with a stylized "R" that has a long, sweeping tail. Below "RUTGERS" are the words "New Jersey Agricultural Experiment Station" in a smaller, sans-serif font. In the background, there is a faint, circular watermark of the Rutgers University seal, which includes a plow and a sheaf of wheat, with the word "RUTGERS" visible at the top of the seal.

RUTGERS

New Jersey Agricultural
Experiment Station

The Hidden Advantage

**THE PEOPLE AT THE CSA
ARE CONSIDERED
CONVINCED CONSUMERS!**

Benefits and Results

- Expand local markets for local NJ seafood
- Increase awareness of seafood providers and in some cases return more money to them.
- Create markets for underutilized species (?)
- High levels of satisfaction among customers
- Can increase CSA produce shareholder numbers
- Potential for expansion



Thanks to the other folks

- Caroline McLaughlin and Lianna Bass, NJ Sea Grant Consortium
- Jen Lamonaca, Sea Salt CSA Farmer
- Peggy Fogarty-Harnish, Executive Director, Keystone Development Group
- The seafood suppliers and the seafood consumers.

RUTGERS

New Jersey Agricultural
Experiment Station

Questions? Thank you!

