

CFAARM and Integrated Seafood Science

10 years of Fish Health and Seafood

Stephen A Frattini DVM
2024 NY Seafood Summit, Hyde Park, NY



Center For Aquatic Animal Research & Management

STEPHEN FRATTINI DVM

Owner/President

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- Founder of the Center For Aquatic Animal Research and Management (CFAARM)
- Cornell University College of Veterinary Medicine (CUCVM)
- Aquatic Animal Health Specialization: production and seafood
- Operations and Compliance



Center For Aquatic Animal Research & Management

Founder & Owner

Cornell AgriTech

Member, Center of Excellence



Center For Aquatic Animal Research & Management

Aquatic Veterinary Practice	Research and Development	Outreach and Education
Disease Diagnostics	Data Management and Health Predications	Integrated Seafood Science Training
Aquatic Consultations	Low Cost On-Farm Behavioral Monitoring	NY Seafood Summit
Management and Biosecurity	Novel Aquatic Animal Therapies	Culinary Market Enhancement



INTEGRATED SEAFOOD SCIENCE

Seafood
Processing



Wholesale

Retail



Consumer



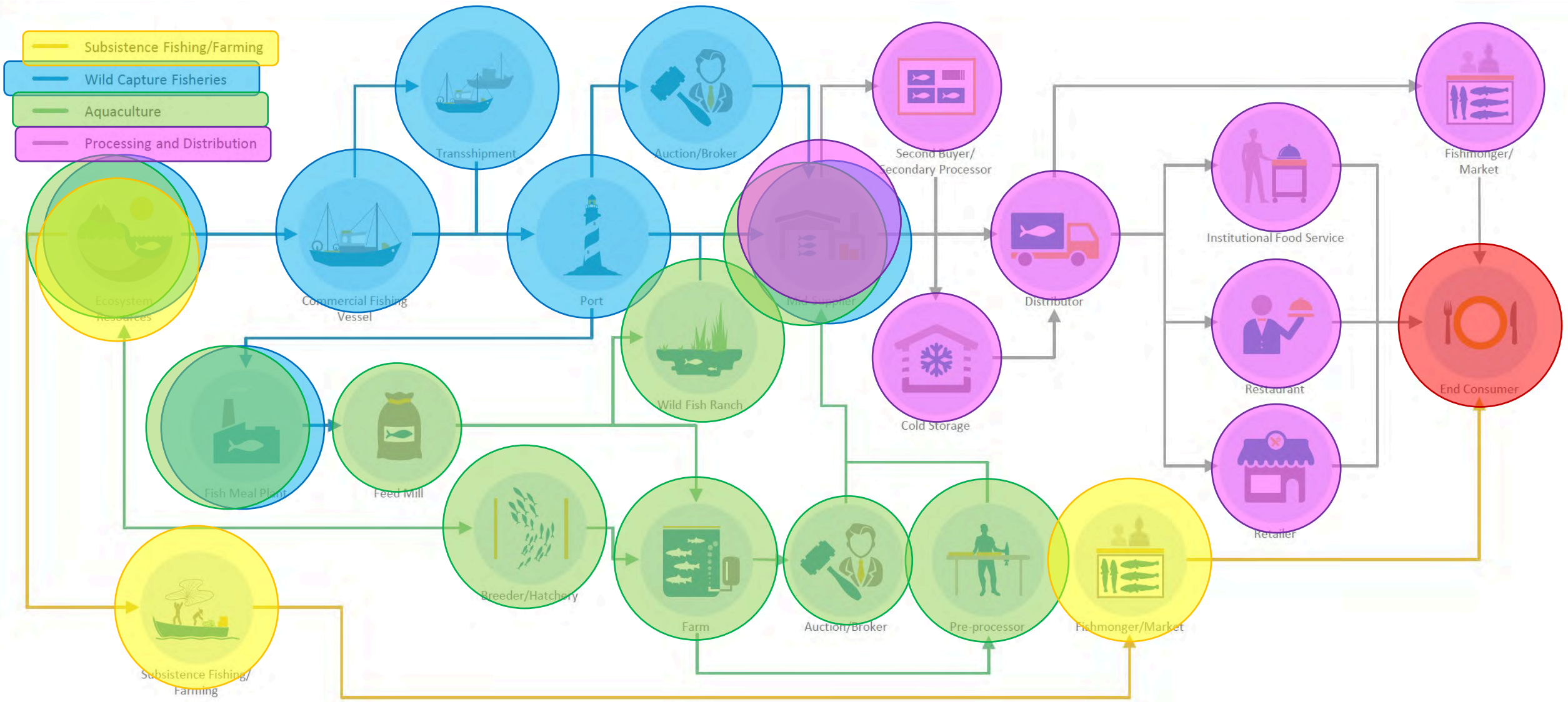
Commercial
Fishing



Aquaculture



Many market actors: seafood supply chains are varied and have many actors—in type and number



- Fishing Operation of Various Sizes
- Target Species are Varied and Regional
- Wild Occurrences of Disease
- Environmental Impact on Stocks
- Climate Change Impact on Stocks
- Supply Chain Issues
 - From Boat to Dock
 - Dock to Market
 - Dock to Consumer
- Economics of Commercial Fishing



Commercial
Fishing

- Farming Operation of Various Sizes
- Species are Varied and Growing
- On Farm Health Management
- Facility Surveillance and Security
- Public/Consumer Climate Regarding Farming
- Supply Chain Issues
 - Facility to Market
 - Market to Consumer
- Economics of Fish Farming
 - Startups
- Feed Revolution

Aquaculture



- Operations of Various Sizes
- Various Techniques Employed
- Mature Seafood HACCP
- Poor Understanding of Market Desire
- Supply Chain Issues
 - Cold-Chain Maintenance
 - Food Safety
- Economics of Processing
 - Position in the Supply Chain
 - Value Added Propositions

Seafood
Processing



- Large Urban Hubs
- Operations of Various Sizes
- Mature Antiquated Distribution
- Growing Use of Tech
- Hard to “break-in”
- Supply Chain Issues
 - Cold-Chain Maintenance
 - Food Safety
- Economics of Wholesaling
 - Position in the Supply Chain
 - Developing Markets

Wholesale



- Consistent Increase in Consumption
- Model Relatively Fixed
- Mature Presentation Strategy
- High Level of Market Research
- Lack of Innovation
- Supply Chain Issues
 - Cold-Chain Maintenance
 - Food Safety
- Economics of Retailing
 - Changes in Consumer Desire
 - Access to Desired Product



- Increasing Consumption
- Various Certifications, Eco-Labels, Etc.
- Mature Tastes, Fixed, But Growing
- Poor Understanding of Supply Chain
- Ethical, Moral Concerns, Welfare
- Supply Chain Issues
 - Exposure to Seafood
 - Access to Seafood
- Economics of Consuming
 - Confusion About Products
 - Increased Desire to Purchase



Consumer

Integrated Seafood Science Education

Initial Implementation

- Summer 2018: Internship-Based Real-World Experiences
 - Direct engagement with the industry
 - In-depth understanding
- ## Didactic Classroom Time
- Synthesize the multiple experiences
 - Exposure to experts in the represented fields



NY Seafood Summit

Meetings

- Fall 2016: Stony Brook Manhattan
- Winter 2017: School of Visual Arts
- Winter 2019: Green Space NYC

- Winter 2020: Green Space NYC

- Winter 2021: Virtual (Week Long)

- Winter 2022: Hybrid (Week Long)

- Winter 2023: Hybrid (Week Long)

- Winter 2024: Hybrid (3 regional meetings)



Fish Welfare



1. Producer Sentiment: A producer centric bridge to the consumer
2. Producer Action: A critical evaluation of the production cycle
3. Production and Welfare Harmony: A combination of sentiment and action
4. Critical Conversations: An openness to engage
5. Harmonizing Sentiment
 - Driving With Data: Lets find out what we don't know
 - Education For Harmony: Learn about how to talk about welfare
 - Can We Close the Gap?

Capacity Building



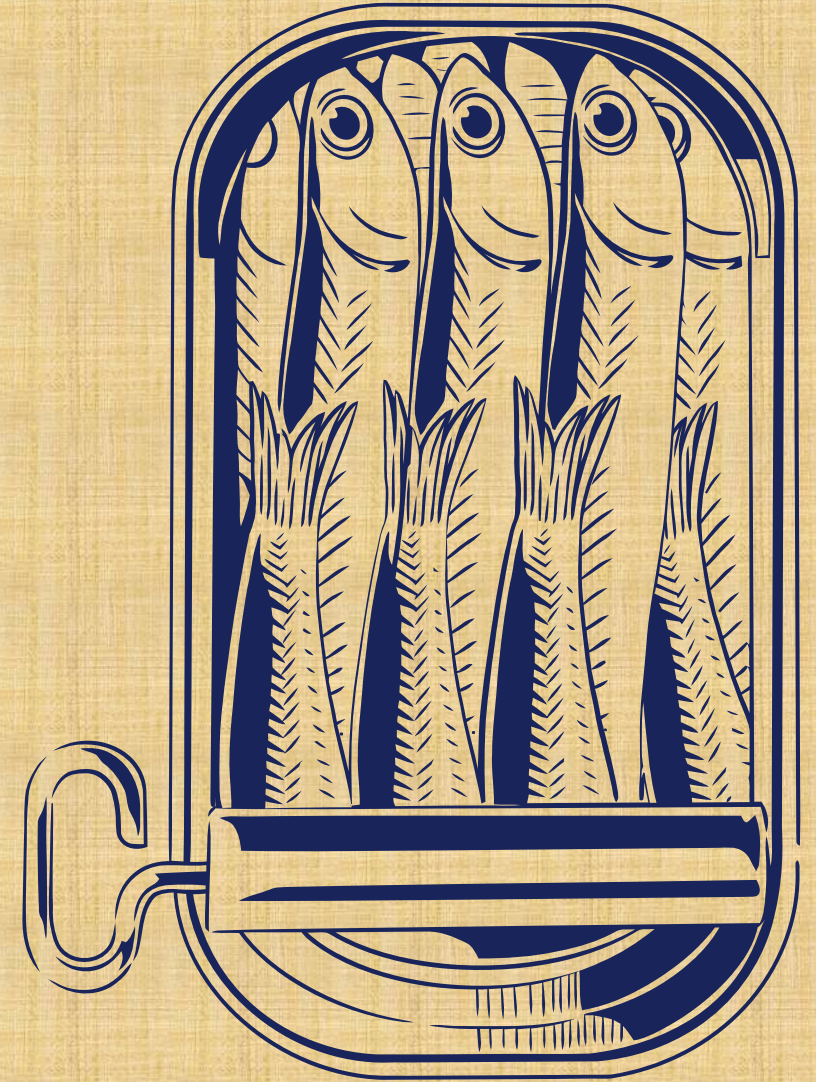
Blue Cove Preserves is an artisanal brand of tinned fish. Last year it launched a line of canned fillets of branzino, locally sourced and hand-packed in olive oil and fine herbs.



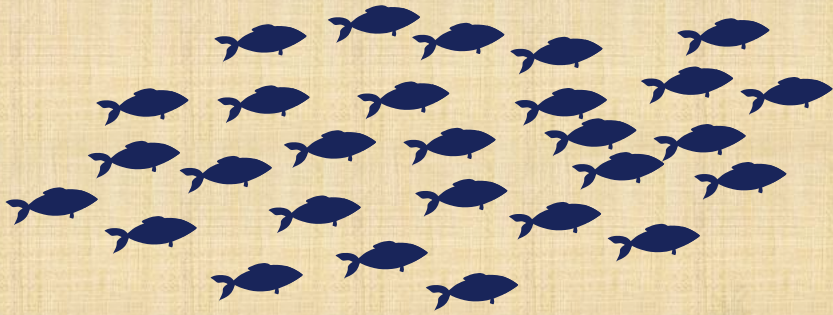
WHAT IS TINNED FISH?

Tinned fish is a preservation technique that conserves fish in tin cans

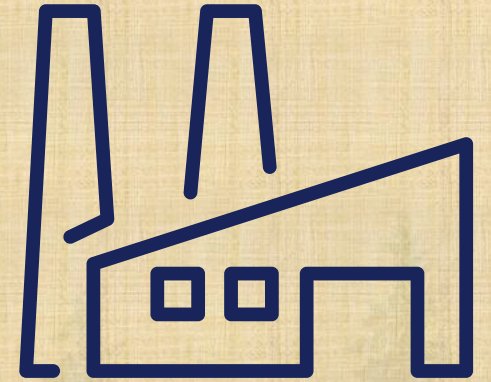
- Shelf stable food. The expiration dates is years, and it can be kept at room temperature.
- Non-perishable food item, contributes towards low food waste.
- Recyclability. Cans are made of metal and have high recyclability.
- High nutritional value.



TODAY'S CHALLENGE



Sourcing: Connecticut

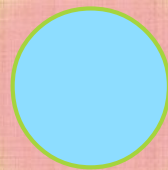


Canning: Washington

There are no artisanal canneries on the East Coast

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