CFAARM and Integrated Seafood Science

10 years of Fish Health and Seafood

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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
• Operations and Compliance
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Center For Aquatic Animal Research & Management
INTEGRATED SEAFOOD SCIENCE
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
• 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
• 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
• 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
• 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
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?
Blue Cove Preserves is an artisanal brand of tinned fish. Last year it launched a line of canned fillets of branzino, locally soured 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

There are no artisanal canneries on the East Coast