

Aquatic Farming in New Jersey

Joseph J. Myers
Aquaculture Development Specialist

Linda J. O'Dierno
Coordinator, Fish & Seafood Program



Charles M. Kuperus, Secretary

Diversity of the Industry

- NJ
- Regional
- Worldwide

Hard Clams

- Hard clam culture began in NJ
- Largest component of NJ aquaculture
- Hatcheries also algae growers

Eastern Oyster

- Late 1800s - 9.2M pounds worth \$1.6M
- 1950s - 4.7M pounds worth \$1.9M
- Collapse from MSX & Dermo
 - Economy followed

Others

- Trout
- Koi and other ornamentals
- Tilapia
- Sportfish
- Aquatic Plants
- Blue Crab Shedding

Systems

- Ponds
- Flow-Through
- Closed
- Leased Bottom
 - Traditional (non-structural)
 - Non-Traditional (structure)

Last Census Information

2005 USDA Special Census

- 87 farms with total sales of \$3,714,000
- 6th in farm gate value in Northeast
- Freshwater farms comprise 51 acres
- Saltwater farms 4,466 acres

Current Information on AFL Program

October 2006

■ 182 Licensees

■ 163 Shellfish

- 106 Clams

- 43 Oysters

- 14 Clams & Oysters

■ 15 Finfish

- 2 Plants

- 2 Finfish & Plants

■ *Applicants*

- *2 in process*

- *166 leaseholders*

Components of N.J.A.C. 2:89 Aquaculture Development

Subchapters

- 1- General Provisions
- 2- Aquatic Farmer License
- 3- Effluent Treatment
- 4- Identification of Aquacultured Stock
- 5- Aquatic Organism Health Management
- 6- Importation of Aquatic Organisms for the Purpose of Aquaculture
- 7- Compliance Monitoring
- 8- Violations and Enforcement

Brief History

- Effective June 7, 2004
- Two Applications
 - Part B – Current Farmers
 - Valid for 90 days, now expired
 - Part A – Prospective Farmers
 - Only accepted application NOW

Review Process

- Initial site visit by NJDA
- Received by NJDA
 - Closed systems reviewed and issued
- Local Review
- To NJDEP Bureau of Shellfisheries
 - Shellfish - Reviewed
 - Finfish - Forwarded to Bureau of FW Fisheries
- NJDEP Returns Review to NJDA
- Resolve outstanding issues
 - Issued
 - AFL info forwarded to NJDEP

AFL Packet

- Aquatic Farmer License
- Laminated ID card
 - Field Work
 - Transport

Effective Period

- 5 years
 - Date of issuance
 - To June 30 of 5th year
- Reapply
- Revisit Rule and Review Process

Who is Required

- Aquatic Farmer
- Produce more than \$2,500 per year worth of aquaculture products.
 - Commercial Farm in New Jersey

Who is Exempt

But can apply for Aquatic Farmer License

- Producers less than \$2,500/yr worth of aquaculture products.
- Hatch or hold aquatic organisms in a fully enclosed building
 - demonstration, education, research
- Public exhibit not > 15 d/yr
- Food processing, retail food establishment, restaurant that hold not > 30 d

Who is Exempt

Not an Aquatic Farmer

- Facilities that hatch or hold aquarium species in a fully enclosed building
- Facilities that hold live bait for less than 30 days
- Public hatcheries
- Shellfish harvesters
 - Rely on natural set
 - No predator protection
 - Wet storage
 - Relay

Benefits to Industry

- Reduce regulatory burden
 - Time is money!
- Strengthen Ownership of Livestock/Crop
- Protection against trespass (N.J.S.A. 4-17.2) and vandalism (N.J.S.A. 2C.18:4-6)

Benefits to Industry (cont'd)

- Implement AMPs
 - Tie in “Right to Farm” protections
 - Proactive Industry
- Help Industry Comply with Federal Standards
 - EPA Effluent Guidelines
 - C.O.O.L Requirements
- Implement Action Items mandated by Aquaculture Development Act

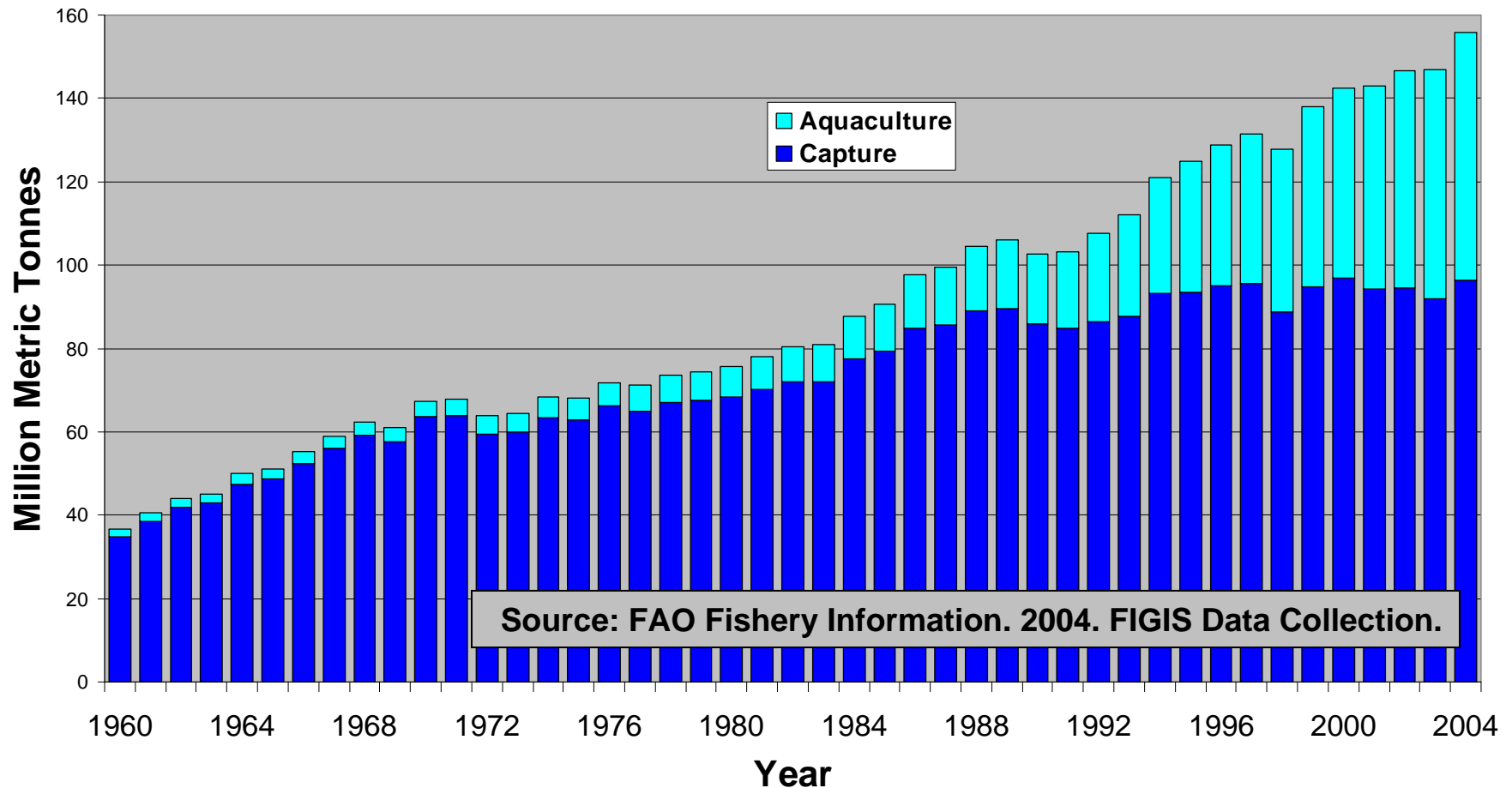
Benefits to Industry (cont'd)

- Establish Health Management
 - Protection against introduction of aquatic pests that may be detrimental to wild stocks and other aquatic farms
- Documented Production Information
 - Eligibility for disaster relief and other programs
 - Strengthen loan applications
 - USDA Census
 - Develop marketing strategies

Aquaculture Quick Facts

Global

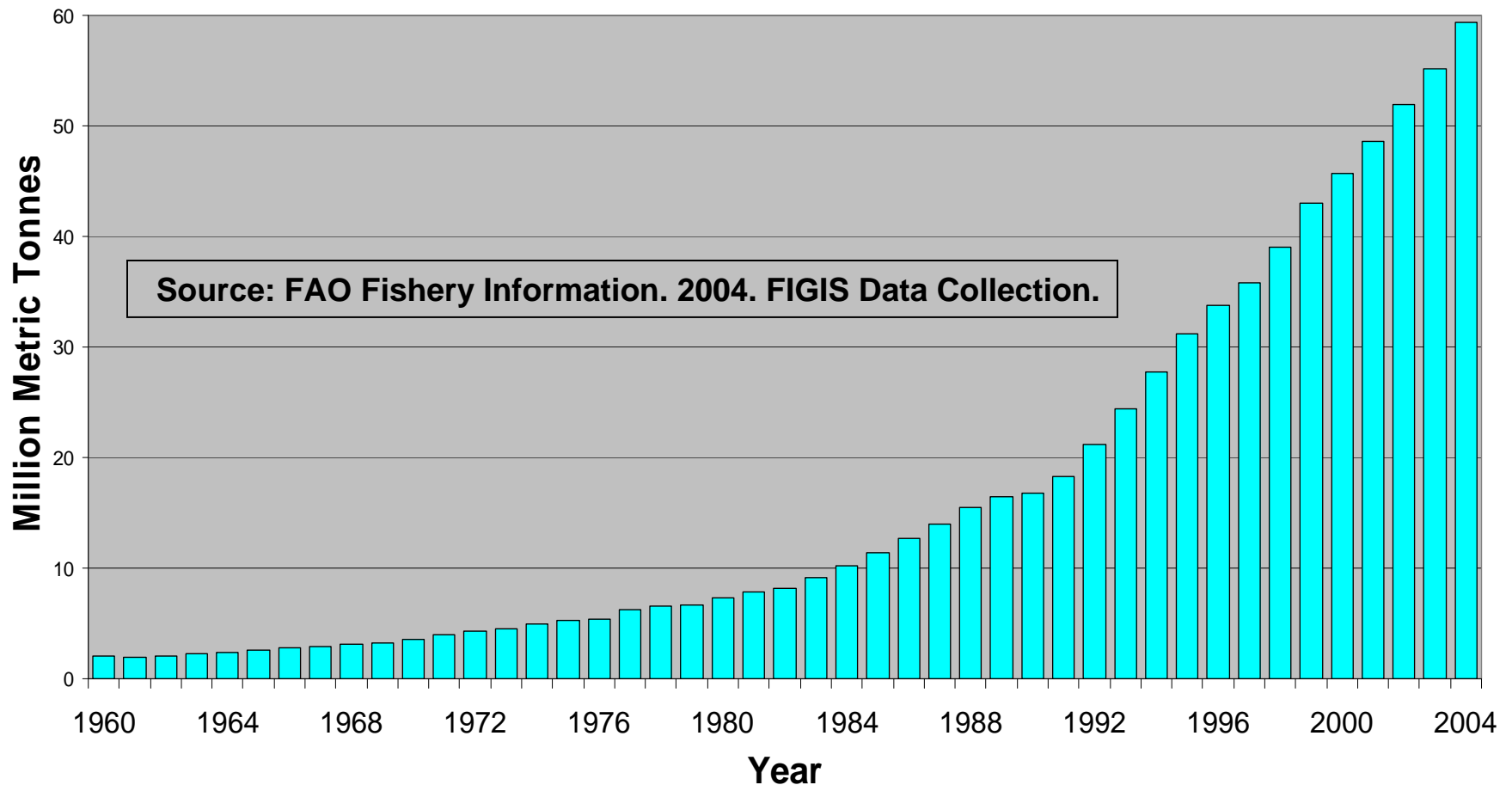
Relative Contribution of Aquaculture and Capture Fisheries to Global Fishery Production (in million metric tonnes) from 1960 - 2004



Aquaculture Quick Facts

Global

World Aquaculture Production (in million metric tonnes) from 1960 - 2004



More Quick Facts

United States

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- US Aquaculture at \$1.092B
 - 16.6 lbs/person/yr (2004)
 - 2x to match FDA 2 meals/week
 - Population increase
 - Seafood #1 contributor US Trade Deficit
 - \$7.8B

Still More Quick Facts

New Jersey

- True
 - Most densely populated state in the US
 - High Land Values
 - But, only really impacts
 - FW aquaculture
 - Aquaculture of food products

Future Development

Policy

- Better utilization of existing lease areas
 - Traditional culture
 - Structural aquaculture in deeper leases
- Data Integration NJDEP, NJDHSS, NJDA
 - Leasing
 - Water Quality Monitoring
 - Production

Future Development

Nearer Future

- Structural Shellfish Culture
 - ADZ
 - 4 in development in Delaware Bay
 - Projected \$4M Farm-Gate Sales from one ADZ
 - Atlantic Coast under discussion
 - General Permit
 - Traditional lease
 - Riparian Grant
- Conservation Aquaculture

Future Development

Further Down the Road

- Offshore aquaculture
 - State Offshore
 - 455 mi² (339 n-mi²)
 - Federal Waters Offshore NJ
 - Additional 29,471 mi² (22,241 n-mi²)
- National Offshore Aquaculture Act of 2005
 - Currently in Committee on Commerce, Science, and Transportation (Senate)
 - Authority to Commerce



JEANNE CHRISTINE
PORT NORRIS NJ

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