Brad Todd
Aquaponics Farm Manager
Lucky Clays Fresh

# NORTH CAROLINA AQUAPONICS

# Background

- Longstanding interest in sustainable agriculture & alternative energy
- Quickly seen lack of scientific & business principles from Aquaponic promoters
  - Prompted in-depth research into both entities, Aquaculture & Hydroponics
- Designed, built, & manage commercial Aquaponics facility at Lucky Clays Fresh

# What Is Aquaponics?

- Generic definition
  - System that combines conventional Aquaculture with Hydroponics in a symbiotic environment
- Common perception
  - Hippies growing pot in bathtubs
- Our Commercial description
  - Joining of two independent systems, Aquaculture & Hydroponics

# Where Does Aquaponics Fit In NC?

- Narrow growth in traditional Aquaculture
  - Western NC
    - Strong market, but restricted by water requirements & permits
  - Eastern NC
    - Saturated markets for cultured species & limitations due to discharge permits

- Data suggests Aquaponics is the largest growing segment in Aquaculture
  - Provides multiple products for wide range of markets & reuses up to 100% of system water

# Why Aquaponics?

- Diversify products
- Additional revenue generated by waste
- New smaller farms can produce comparable revenue to large, conventional Aquaculture facilities
- Established farms likely have infrastructure already in place

# Benefits For New Farmers

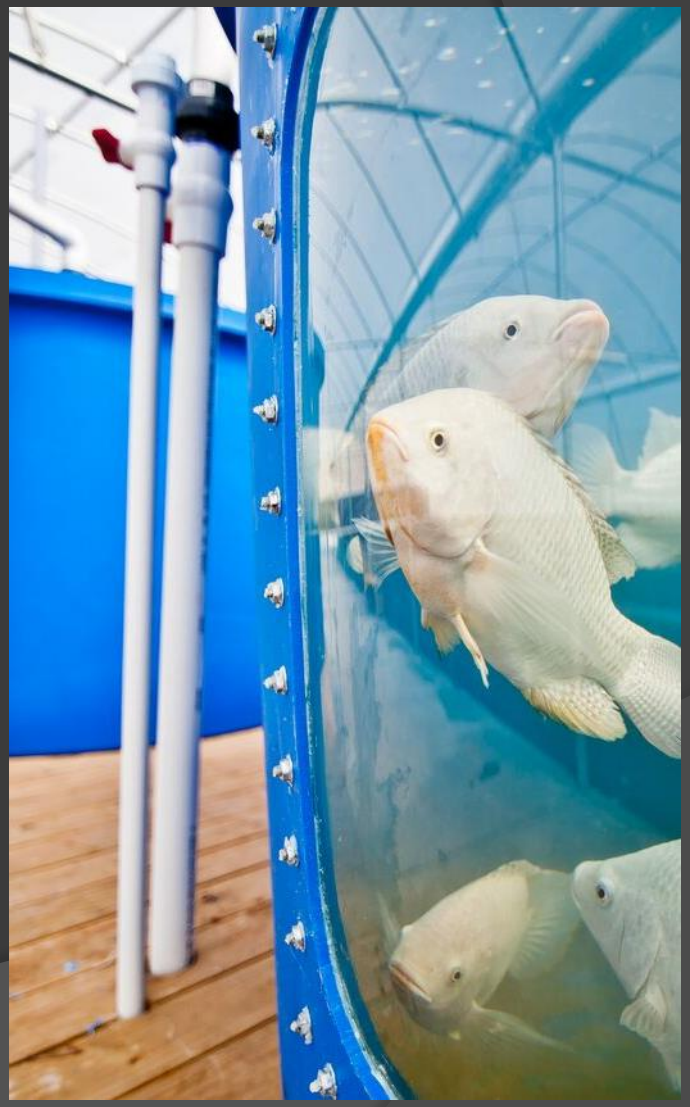
- One system, multiple products
  - Leafy greens & herbs
  - Fruiting & flowering crops
  - Medicinal plants
  - Fish
- Intensive Production
  - Smaller facility footprint
  - Lower overhead
  - Less investment with greater output

# Benefits For Current Aquaculture Facilities

- Use wastewater discharge
- Alternative revenue stream
  - Broader customer base
  - Supplement existing sales
- Increased PR

# Numbers to Think About

- 1 lbs. of fish feed a day =
  - 180 heads of Lettuce in 6 weeks or
  - 320 Basil plants in 6 weeks
- 90% of revenue from plants
- 1 person can operate 1500 ft2 of grow-space/week
- Reuse up to 100% of culture water

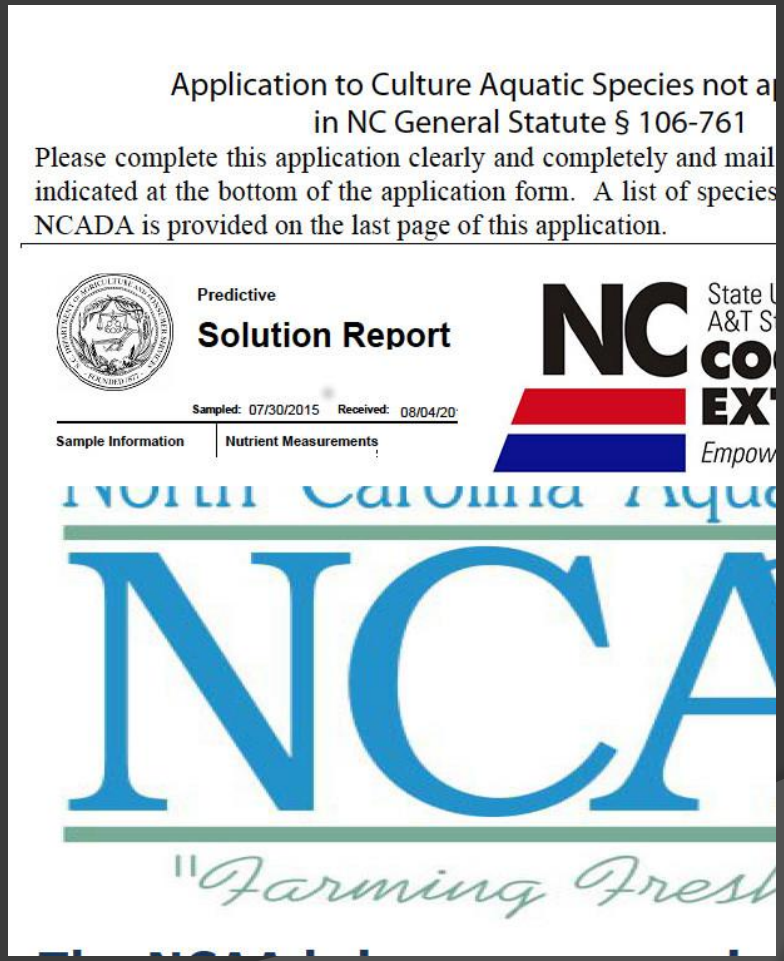


# Promoting Aquaponics In NC

- Provide quality, science-based information
  - Majority of interest from beginners
- Dispel misinformation
  - Support commercial viability of Aquaponics
- Create industry partnerships

# Continued Support

- NCDA&CS: Affordable and Quality Solution Analysis
- NCDA&CS, NC Wildlife Resources, NCAA: permitting, marketing
- NC Extension: technical assistance and collaboration



# Questions?

***www.LuckyClaysFresh.com***