

AQUAPONICS: TRUTHS AND MYTHS

Aquaculture Boot Camp 2

OSU South Center

March 11, 2017

AQUAPONIC TRUTHS

An abstract graphic consisting of several thin, white, parallel lines that originate from the bottom right corner and extend diagonally towards the top right corner of the image.

- ▶ High Quality, Safe Food
- ▶ Fresh, Local, Domestic
- ▶ Environmentally Friendly
- ▶ The Future of Farming



GREEN FOOD PRODUCTION SYSTEM

- ▶ You Will be Married to the Farm!
- ▶ Failures are Inevitable! Plan for Them.
- ▶ Back Up is Essential!
- ▶ Capital Intensive!
- ▶ Environmental Friendly!



AQUAPONICS IS RAS

- ▶ Consultants
- ▶ Engineers
- ▶ Educators
- ▶ Vendors
- ▶ Social Media



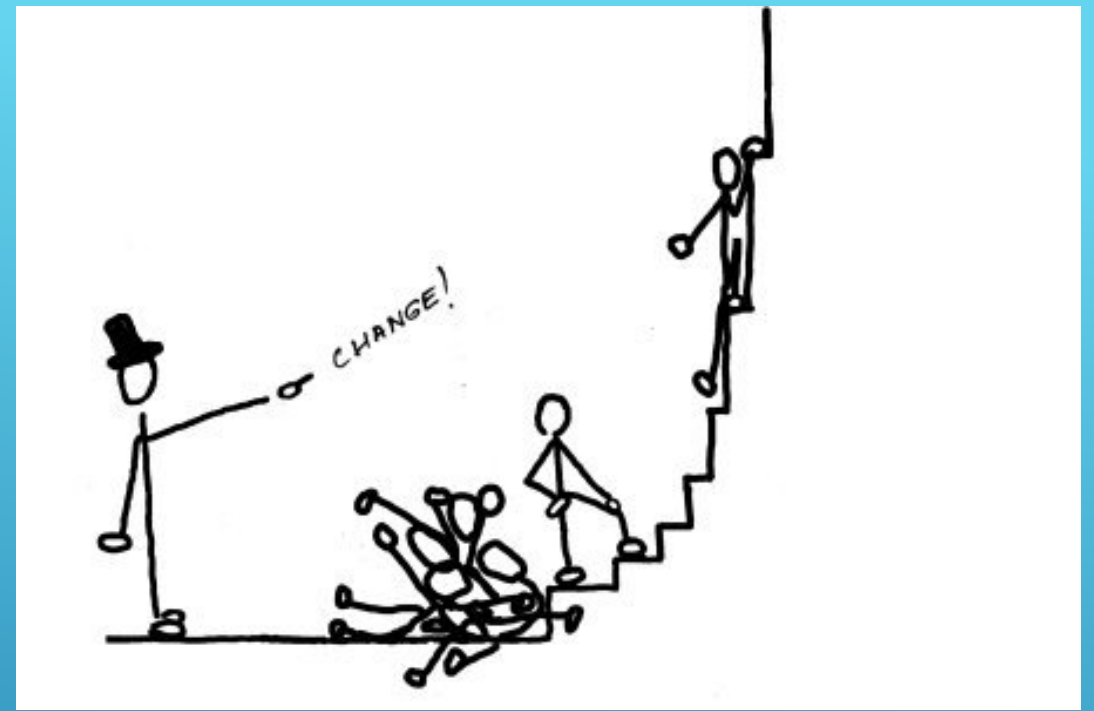
AQUASHYSTERS ABOUND!!

- ▶ Nutrient Recycling
- ▶ Water Conservative
- ▶ RAS with NO Biofilter
- ▶ Ecosystem Approach
(Dirty vs Clean)
- ▶ Consistency is Key



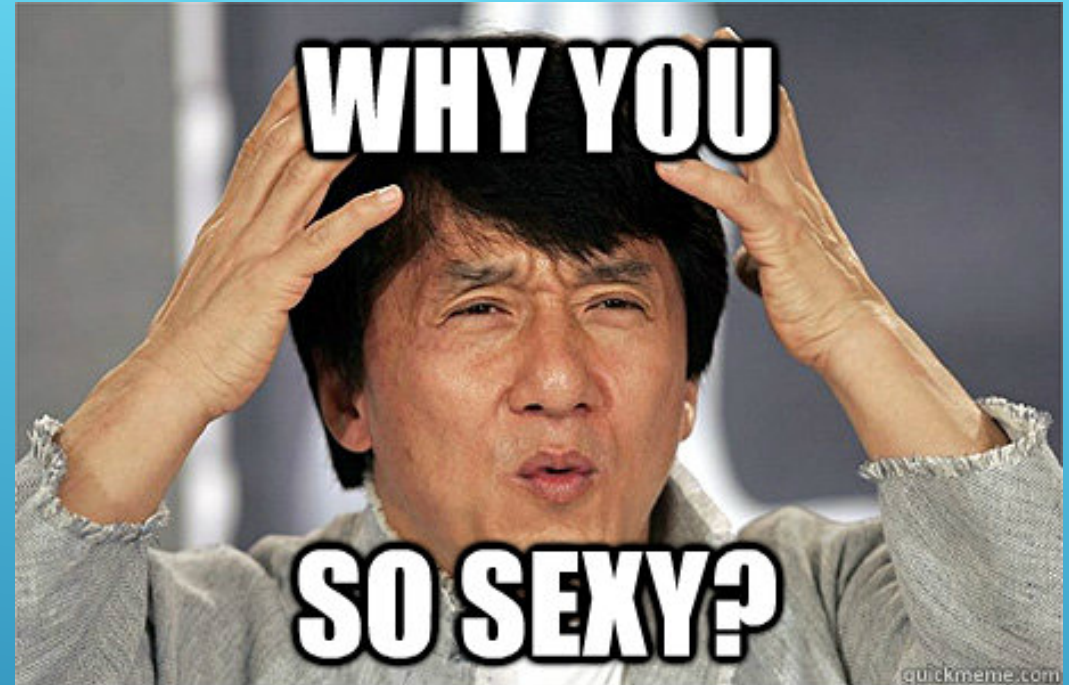
A NEW PARADIGM IN FOOD
PRODUCTION

- ▶ Fish Skills
- ▶ Plant Skills
- ▶ Marketing Skills
- ▶ Natural Treatment for Pests
- ▶ Double Dose of Vendors
- ▶ Double Dose of Regulations and Inspections!!



THE LEARNING CURVE IS STEEP!

- ▶ It's Cool and Sexy!
- ▶ Popular Sector of Aquaculture
- ▶ Share Your Story
- ▶ Embrace Ecotourism
- ▶ Accentuate the Positive
- ▶ Promotes Domestic Aquaculture



YOU WILL ATTRACT ATTENTION!

- ▶ Vegetable
- ▶ Fruit
- ▶ Ornamental
- ▶ Medicinal
- ▶ Does it Make Money?
- ▶ What Does the Market Want?



YOU CAN GROW ANY PLANT!

AQUAPONIC MYTHS

The background is a blue gradient. On the right side, there are several thin, white, parallel lines that start from the bottom and extend towards the top right corner, creating a sense of motion or a stylized graphic element.

- ▶ Fish, Plants and Microbes!
- ▶ Ecosystem Development Takes TIME!
- ▶ Paradigm Shift



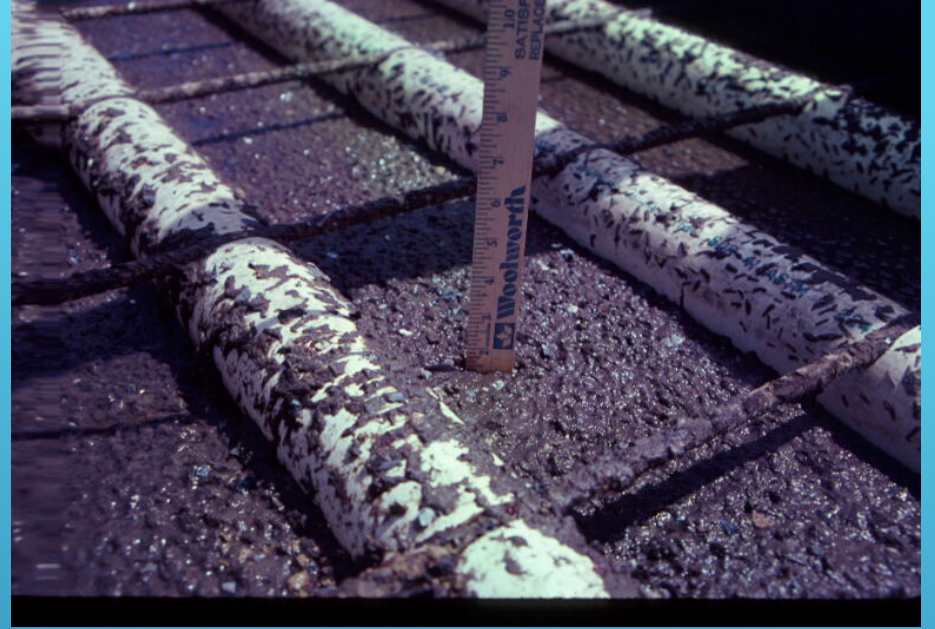
AQUAPONICS IS
AQUACULTURE + HYDROPONICS

- ▶ Few Commercial Models Exist
- ▶ Failures Abound
- ▶ Lazy-Man's Hydroponics, BUT see RAS Slide
- ▶ Coolness Wears Off...Demands Still Exist
- ▶ Staggering Fish and Plants Complicated
- ▶ Marketing Fish and Plants Complicated
- ▶ Wading Through Regulatory Issues Complicated



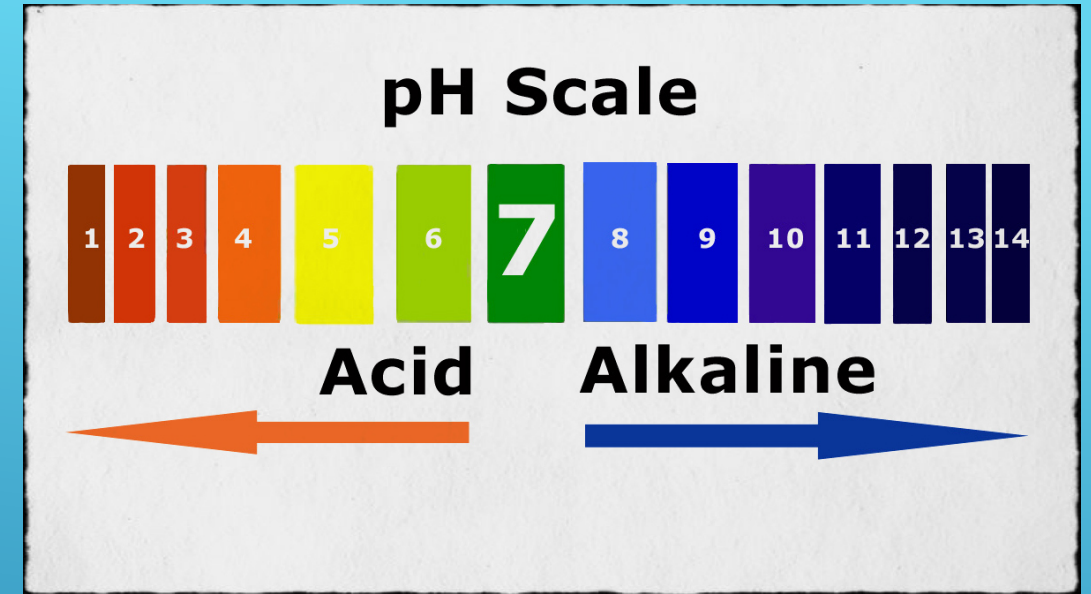
EASY WAY TO MAKE MONEY

- ▶ NOT for Commercial Fish Stock Rates
- ▶ Faster Removal is Not Better
- ▶ Solids Can be Digested
- ▶ Improper Solids Removal has Led to Majority of Failures



SOLIDS REMOVAL IS OPTIONAL

- ▶ Fish slightly Alkaline
- ▶ Plants slightly Acidic
- ▶ Microbes slightly Alkaline
- ▶ Compromise at pH 7.0
- ▶ pH can be lower if Fish are Tolerant



pH MUST BE MAINTAINED AT 7.0

- ▶ USDA Owns the Word Organic
- ▶ No Fish Organic Certification in USA
- ▶ Plants CAN be USDA Certified Organic in USA
- ▶ Is it Worth It?
- ▶ Is it Better Than Organic?



IT'S ORGANIC!

- ▶ Do Your Marketing Homework FIRST
- ▶ Grow What the Market Wants
- ▶ Secure Purchase Contracts
- ▶ Develop Detailed Business Plan
- ▶ Analyze Financial Statements



IF YOU BUILD IT THEY
WILL COME!



WELCOME TO THE CLUB!