

Rookie Mistakes to Avoid or Don't make the same costly errors everyone else makes

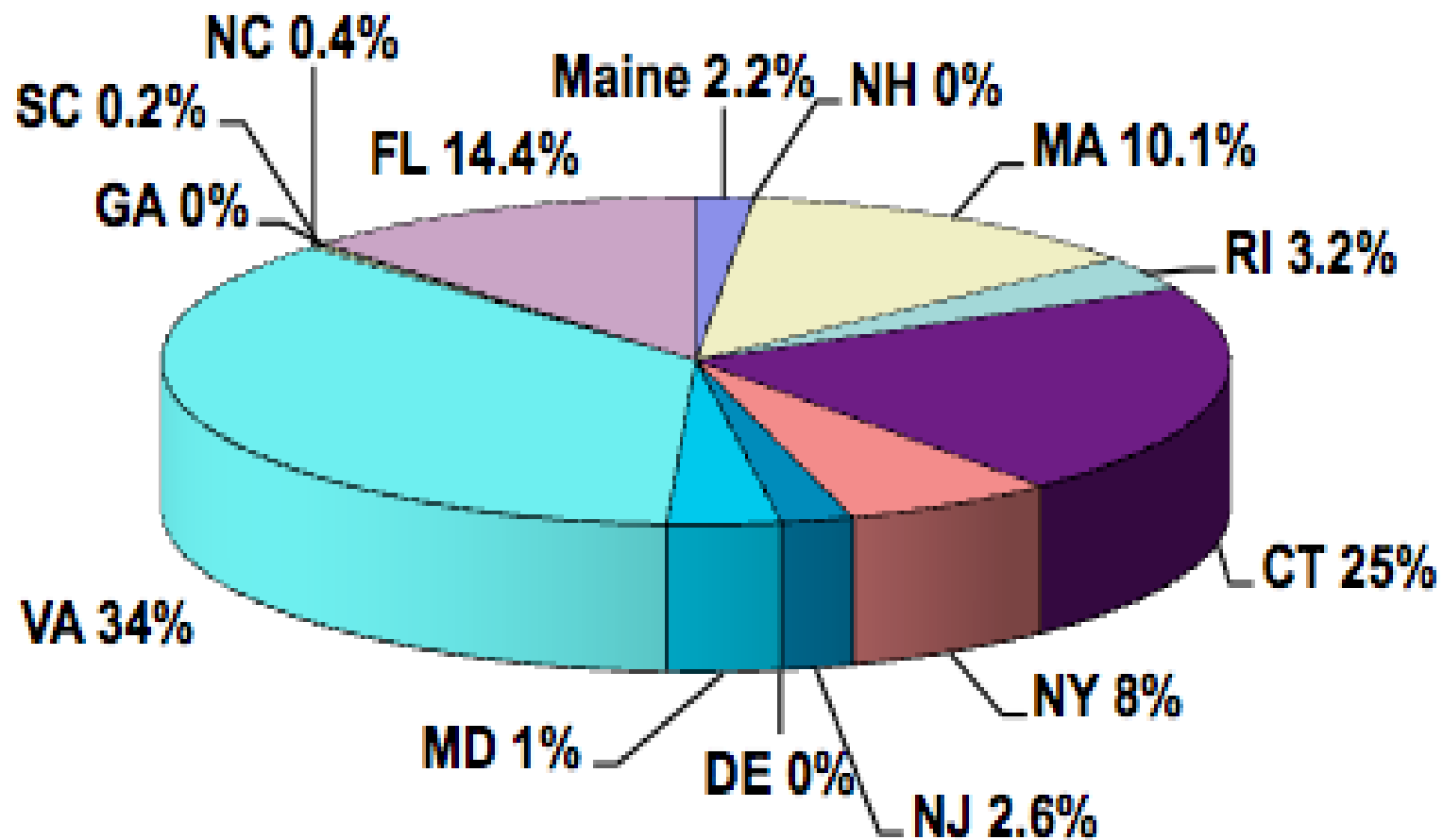
**Bob Rheault
East Coast Shellfish Growers Association**

**bob@ECSGA.org
www.ECSGA.org**



Shellfish Aquaculture by State

percent of total East Coast
\$154 million farm gate



Industry Snapshot

- ~1300 farms from Maine to Florida
- Primarily small farmers with less than 10 employees
- Collectively harvest \$155M
 - 60% clams, 39% oysters
 - production growing 5-10% / yr
 - oyster production doubled in 5 yrs

(#1 mistake of new growers)

Don't Let Greed Overcome Common Sense

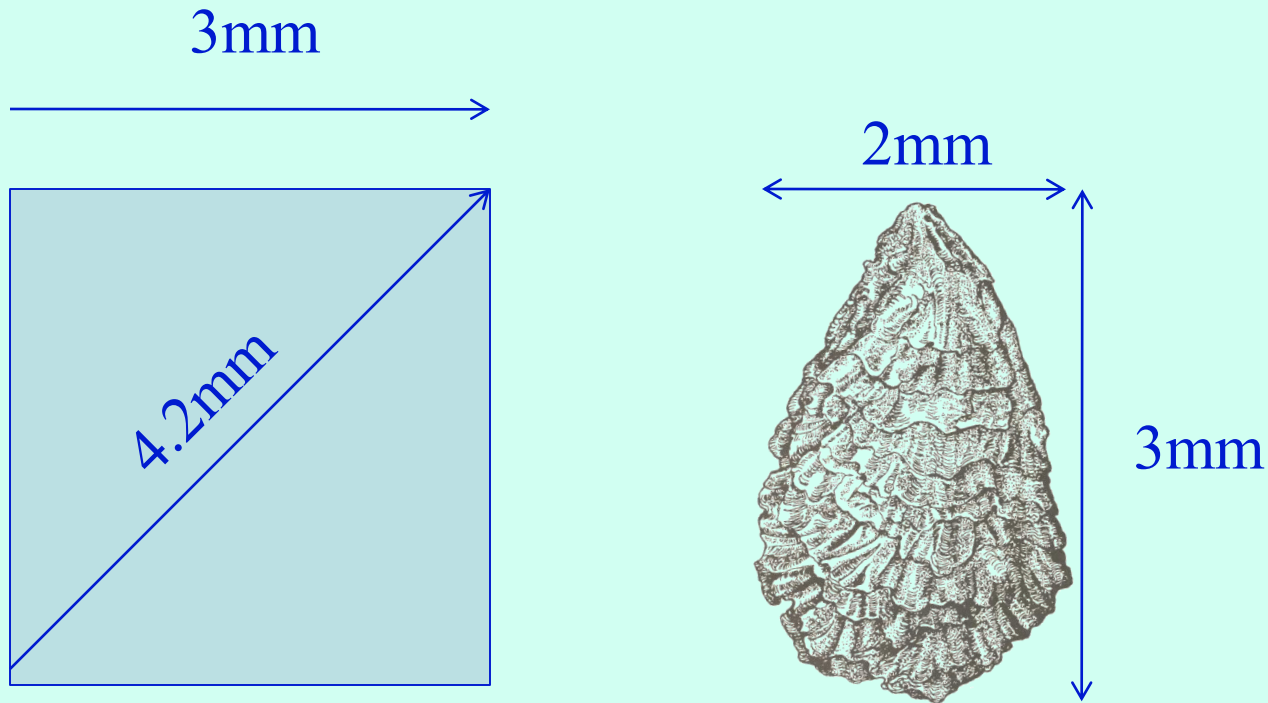
- Don't buy more seed than you have gear to hold it in or time to maintain
- Overcrowding and fouled gear yields poor growth, thin meats, mortalities
- Dump or sell extras



Don't think you know everything

- Get advice
- Volunteer on another farm
- Hire a consultant
- Read a lot - there is tons of free advice on the web
- Each of these is cheaper than making a big mistake

Seive Size \neq Seed Size



Check before you plant -
A close fit is not a good fit

If seed size is too close to mesh size – seed will grow into the mesh



You will probably kill many
trying to extract them

Start Small

make less costly errors

You can learn almost as much by killing a few thousand as you can by killing millions



Mother Nature is your partner, but she is not your friend

Waves have incredible
power

Size anchors, ropes etc.
for the worst case

Use stainless fasteners,
pinch pennies
elsewhere



Learn to grow large seed first

You will have market size product sooner

Small seed can be tricky to work with

Large seed is more expensive, but seed will never be one of your top expenses



Ordering Seed

Order early

Send deposit in February

Order from several
hatcheries

Sell surplus seed



>Flow > Grow > Dough

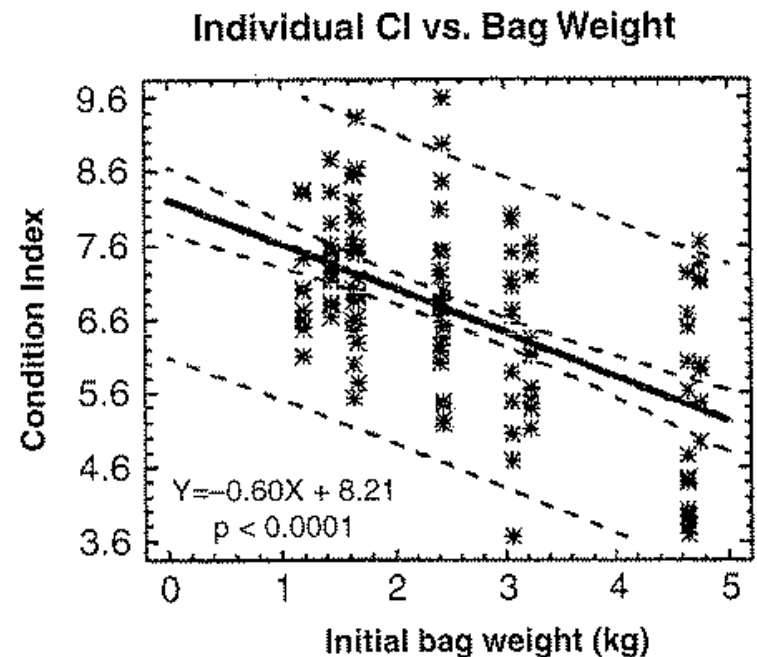
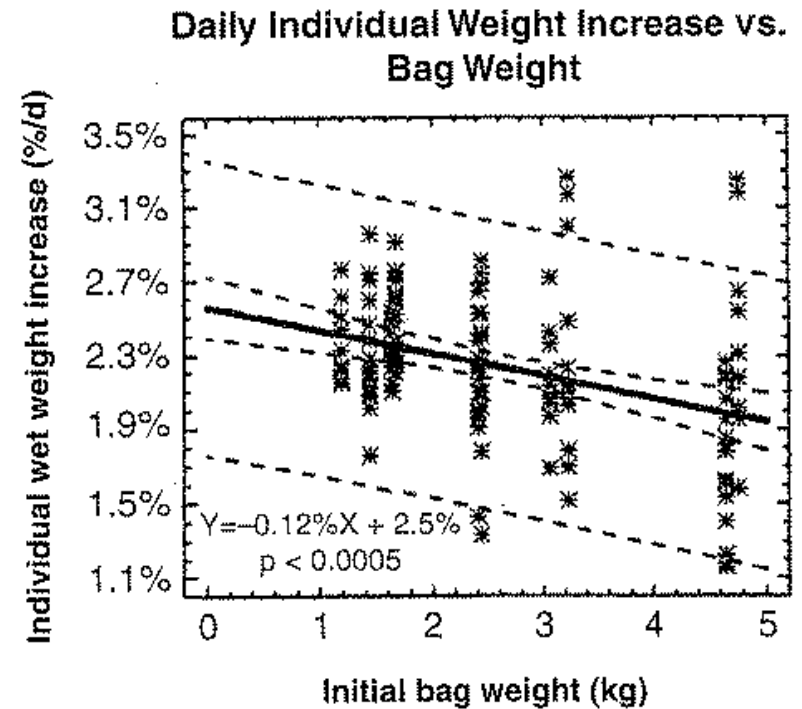
- Flow rate important for dense populations

Seston flux = current x concentration

- Concentration and composition important
- If food is limiting - growth slows, condition index suffers, more susceptible to diseases and variation in size increases, longer to harvest size (more sieving, more gear, more work)
- Optimum stocking density determined by size, species, food concentration and flow

Food Availability

- Flow x Conc. = Flux
- flux is ration /day
- Growth
- Condition Index
- Stocking density
- Gear & labor cost
- Profitability



Our Fundamental Challenge

How can I protect my crop from predators

Yet still maximize flow rate / stocking
density

While maintaining millions of live animals

In durable, inexpensive containers that are
easy to maintain ?

Starving oysters don't grow

90% of the flow goes around
a clean $\frac{1}{2}$ mesh bag

99% goes around a fouled bag
or a very fine mesh bag

No flow - no grow - no dough



Brine dips are great unless they get hot
a ten minute dip in 110 degree brine is
probably 100% lethal



Diversify

- If you can grow multiple species in multiple sites you have a better chance of not losing everything all at once.
- If you are starting out, try multiple gear types... don't pretend you know it all.

Don't Quit Your Day Job

- It will take you longer to make a profit than you think
- Plan to lose a crop every ten years
- When you scale up your mortality rate and costs will go up faster than you projected
- Spreadsheets are great, but shellfish can't read

Be a good neighbor

- You are working in public waters.
- Don't make a mess, don't break the laws, don't get people sick.
- Use the ECSGA Best Management Practices template, develop a farm plan.

Make friends

- Get to know your neighbors
- Talk to other growers
- Talk to your regulators
- Talk to your extension agent
- Join your state association

Don't Make Enemies

- Don't piss off your neighbors
- Don't get somebody sick
- Don't attract the attention of regulators
- Don't make a mess in the commons

NAP Insurance is cheap

- Talk to your local Farm Service Agent about signing up for Non-insured Crop Disaster Assistance
- Not great coverage, but it sure is cheap
- Don't wait until after the hurricane

Take lots of notes

- Waterproof notebooks from Forestry Supply are cheap
- Memories are usually unreliable
- Documenting a loss is only possible if you have documentation
- Write down planting densities, survival rates, harvest times, temperatures, extreme weather events....

Cut costs

- Cutting costs is the fastest way to improve your profit margin
- Increasing sales provides an incremental gain, but only if you have a positive profit margin
- If you are losing money on each oyster, selling more doesn't help

You make money by selling shellfish, not by growing them

- Spend some time thinking about how you will sell your product
- The Marketing Plan may be the most important chapter of your business plan
- Good advice on the ECSGA website

A Few Thoughts on Marketing

- Differentiate your product from competitors
Taste, shape, packaging, service, freshness, quality, consistency -
- Tell a story, sell the experience
- Don't compete on price unless you can be the low-cost producer - avoid the drive to the bottom
- Quality makes the difference
- Figure out who your customer is and what they want - and then deliver it to them

Never Drop Your Price

- If you sell out before May you can probably charge more. You are leaving money on the table.
- We typically see a nationwide shortage of quality oysters in the spring.
- If you are still holding inventory in July then study my marketing advice.

Just a few of the aquaculture hazards that I have either personally experienced or heard about

Customer doesn't pay, can't find seed, sunburn, sick customer sues, back gives out because of too much heavy lifting, shellfish allergy, wife leaves you because of inadequate income, finger cut off in winch, slip and fall on ice, skin cancer, lacerated hand, hearing loss, pressure washer injury, diving accident, electrocution, insanity, shucking accident, cataracts, arrested for hiring undocumented workers, boring sponge or mudblister renders crop worthless, mass mortality due to disease, oil spill, bookkeeper embezzles funds, perfect storm destroys gear & smothers crop, Cease and Desist Order and fine for conducting "Illegal Aquaculture", life threatened by imposing fishermen, Jones Act lawsuit, trucker freezes shipment, injured jumping out of truck, seasonal hypoxia kills crop, trademark abuse, poachers, bad press linking you to illness, argument with regulator leads to repeated violations and expensive lawyer fees, frostbite, employee sues for sexual harassment, hit a rock (again), boat sinks, near drowning, seaweed smothers crop, depression, boat comes loose in a storm damaging expensive yacht, hypothermia, heat exhaustion, tendonitis, shipment lost in transit, replacement shipment lost in transit, cell phone falls overboard (again), infected laceration, Perfect Storm trashes crop, hatchery sends wrong species, angry fisherman cuts mooring and marker buoys,

To get a copy of this and more send me an
e-mail bob@ECSGA.org

