Aquaculture Gear Management Techniques

Overview

- Derelict gear
- Public perception
- Permanent Gear Tags
- Best Management Practices (BMPs)
- Key Takeaways - NC Aquaculture Development Conference 2021
Aquaculture Gear Management Techniques

Derelict Gear

❖ Issues
• Hazards to wildlife and navigation
• Contributes to negative public perception
• Reduces profitability

❖ Causes
• Storm events
• Improper gear maintenance/farm management

❖ Solutions
• Tracking mechanisms (i.e., permanent gear tags)
• BMPs
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Public Perception
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Permanent Gear Tags

❖ Benefits

• Able to identify gear after storms for retrieval
• Tracking mechanisms
• Theft
• Minimal cost
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Best Management Practices (BMPs)

❖ Help Avoid Issues
- Set guidelines for siting, design, and operations
- Storm preparedness plans
- Focused around:
  - Operational/maintenance issues
  - User conflicts
  - Permitting and siting
  - Environmental Concerns
Help Avoid Issues

- Siting errors leading to damaged and lost gear
- Broken lines, anchors, and attachment points from wear & tear
- Gear choices leading to excessive waste
- Avoidable storm damage

- All of these improve public perception!
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Best Management Practices (BMPs)

❖ Templates
• FL Dept. of Agriculture and Consumer Services
• NC Coastal Federation/NOAA/Sea Grant
• Gulf States
• East Coast Shellfish Growers Association
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Best Management Practices (BMPs)

Positive Public Perception and NIMBYism
- Adopt and follow a good neighbor policy
- Encourage traditional uses of the water
- Educate public on the benefits of shellfish aquaculture
- Get involved in community action programs
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Best Management Practices (BMPs)

❖ Good Neighbor Policy
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Best Management Practices (BMPs)

❖ Good Neighbor Policy
• Markings
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Best Management Practices (BMPs)

❖ Good Neighbor Policy
  • Markings
  • Noise

![Image of noise guidelines]

**NOISE**

Owners, Visitors and Tenants

• Please be considerate of others.
  **EXCESSIVE NOISE is PROHIBITED AT ALL TIMES**
• Noise levels must be at minimum levels after 10:00PM at night.
• Use headsets for music and movies after 10:00PM

**Shhhhh!**

**USING COMMON COURTESY… makes for happy neighboring**
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Best Management Practices (BMPs)

❖ Good Neighbor Policy
• Markings
• Noise
• Odors
Good Neighbor Policy

- Markings
- Noise
- Odors
- Upland storage areas
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Best Management Practices (BMPs)

❖ Record Keeping
  • Detailed records
  • Observations, measurements, and counts
  • Technology and regulatory changes
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Best Management Practices (BMPs)

❖ Farm Level BMP’s
  • Consider farm site, gear type, and culture methods
  • Create BMP guide for organizing work and record keeping
  • Update BMP with changes to activities
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Poll Question

What method have you used to prepare your shellfish lease for storm impacts?

a) Sinking cages/removing floats from bags
b) Increasing oysters per bag bringing gear below surface off bottom
c) Reducing oysters per bag reducing weight of gear
d) Inspecting and replacing parts of the gear
e) Attaching additional anchor points
Key Takeaways

• Choose site before choosing gear
• Prep farm for storms rather than moving gear/product off site
• Capacity to prep farm before a storm (i.e., farm size)
• Always overspend on big anchors - Bigger the better!
• Oversize lines and learn your knots
• Protect your vessel for mobility after storm
• Permanent gear tags are well worth the investment
Questions?

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Shellfish Lease and Aquaculture Program
http://portal.ncdenr.org/web/mf/habitat/enhancement/shellfish-leases

Shellfish Aquaculture Tool
https://arcg.is/0LD5zS