MARSH MADNESS

Engaging students and the public in estuarine restoration

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CITIZEN SCIENCE

Provides:
- Greater project scope, sampling frequency, # of sites
- Increased understanding and appreciation by participants
- Sense of ownership
- Community connections

Requires:
- Time for training, feedback
- Increased QA/QC
- Streamlined methods
MARSH MADNESS

- Collaboration between state agency, non-profit, and public school system
- Train students on environmental monitoring techniques in a restored marsh
- Collect data on growth/development of restored marsh
MONITORING ACTIVITIES

- Fiddler crabs
  - population dynamics
  - mathematics

- Bird surveys
  - adaptations
  - habitats

- Water quality
  - units of measure
  - human impact on nature

- Seining
  - fish identification
  - biodiversity

- Plant identification
  - field observations
  - plant anatomy
MONITORING ACTIVITIES

- **Fiddler crabs**
  - population dynamics
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- **Bird surveys**
  - adaptations
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- **Seining**
  - fish identification
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- **Plant identification**
  - field observations
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263 participants
1,027 hours!
CHALLENGES...

• Distractions
• Pre-conditioned students
• Volunteer-led
• Activity timing
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SOLUTIONS...

- University of Central Florida students
- Extra credit/grade
- Faculty-led
- Flexible timing
AND THE WINNER IS...

Water quality testing!

- Well-established protocols (Adopt-An-Estuary)
- Experienced leader
- Part of ‘bigger picture’

http://www.marinediscoverycenter.org/adopt-an-estuary/
SUCCESSFUL C.S. PROGRAMS

Adopt-An-Estuary
Seagrass surveys
Horseshoe crab surveys
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MOVING FORWARD

- Marsh Madness = field trip program for MDC
- Independent student (HS and college) research projects
- UCF monitoring continues
- Volunteer engagement continues
  - Monitoring
  - Harvesting
  - Planting
  - Research
BENEFITS TO NERT

- Public engagement
  - Builds support & understanding
  - Students considering college/career options
- Research opportunities and assistance
- Plant production
- Informal education & tour setting
- Specialization of labor!
ANY QUESTIONS?

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