

# Center Science and Restoration Project Updates

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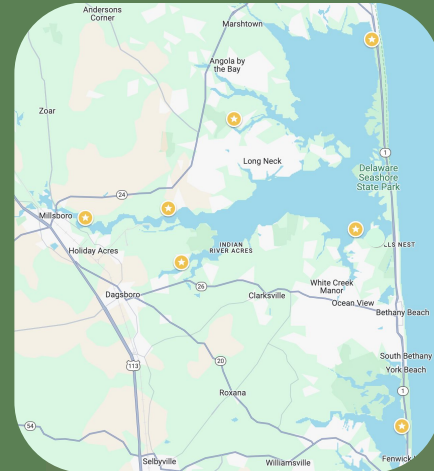
Participatory Science





# Continued Water Quality Monitoring

- ❑ Temperature, Specific Conductivity, Dissolved Oxygen, pH, Turbidity, & Chlorophyll
- ❑ April through October
- ❑ 7 current sites
  - ❑ Pasture Point added 2024
  - ❑ Add Love Creek in 2025
- ❑ Changes for this season:
  - ❑ Every 15 minutes
  - ❑ Co-located surface grab samples
  - ❑ Transects

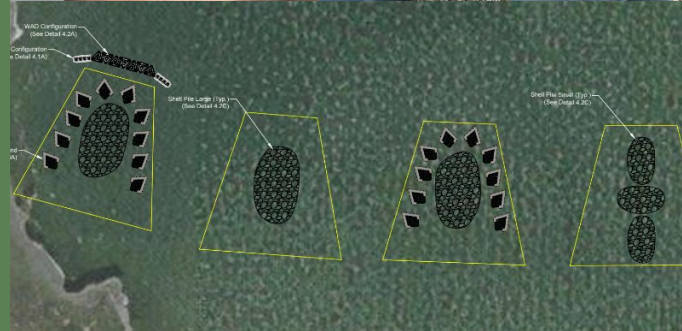




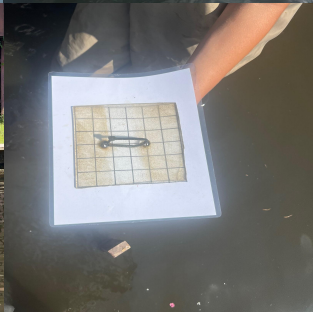
# Oyster Reefs



- ❑ Pasture Point Reef - TNC SOAR/CWQIG funded
  - ❑ Construction completed today!
  - ❑ Largest reef in Inland Bays
    - ❑ Experimentally tests new construction methods
    - ❑ Pre-monitoring during Summer '24
- ❑ Co-hosted intern with Delaware Delicious Seafood
  - ❑ Improved understanding of aquaculture practices
  - ❑ Ramped up our oyster production & tested new techniques

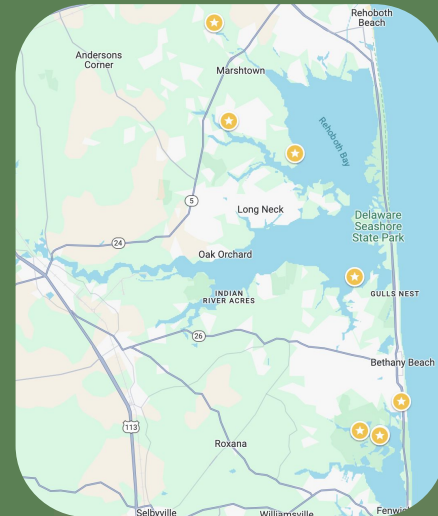






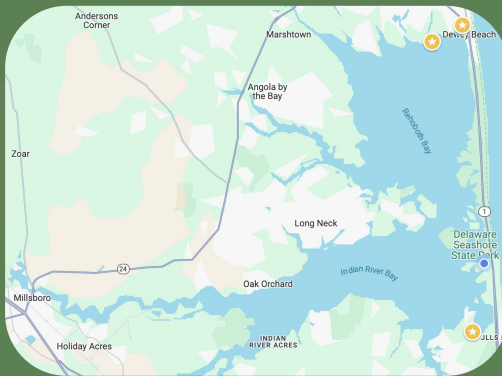
# Submerged Aquatic Vegetation

- ❑ Harvested 2.1 million widgeon grass (*Ruppia maritima*) seeds
  - ❑ South Bethany residential canals
- ❑ 8 sites monitored for habitat suitability
  - ❑ Light, temperature, salinity, DO, algae, wave action
- ❑ Planted  $\frac{1}{3}$  acre (150,000 seeds) in July
  - ❑ Cove in Assawoman Wildlife Area
- ❑ 2 plantings planned for November
  - ❑ Cove & Sassafras Landing in Assawoman Wildlife Area



# Living Shorelines

- ❑ Thompson Island Living Shoreline
  - ❑ Received permitting
  - ❑ Phase 1 “sent out to bid” with a NOA issued: NTP expected later this month
- ❑ Sunset Park Living Shoreline
  - ❑ 60% Design completed
- ❑ Living Shoreline Monitoring and Maintenance
  - ❑ Implemented first season of QAPP monitoring methods
- ❑ Sassafras Landing and Read Ave Living Shorelines

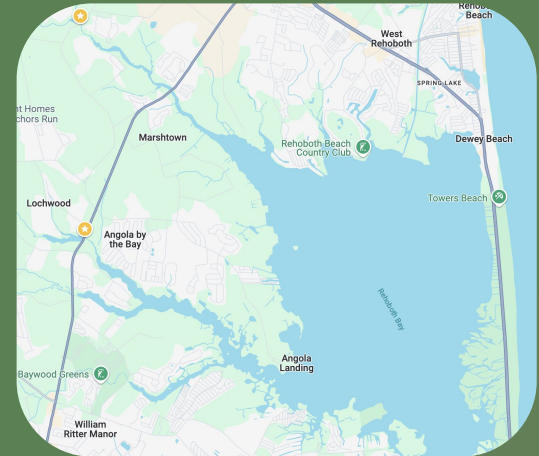






# Eelways

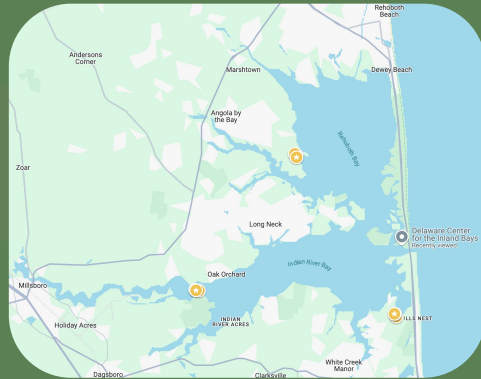
- ❑ Burton's Pond eel ladder repaired
  - ❑ ~15,000 eels passed
    - ❑ Mostly Age 2-3 Yellow Eels
    - ❑ Limited success with Age 1 Glass Eels
- ❑ Redesigning the Burton Ladder for 2025 season
  - ❑ Increase passage of Glass Eels





# Long Term Salt Marsh Monitoring

- ❑ Measured since 2008
- ❑ 9 sites in total
  - ❑ 3 each at Angola Neck Preserve, Piney Point, and Slough's Gut
  - ❑ 1 shallow & 1 deep SET at each site
- ❑ Measured in April & October
  - ❑ Reducing frequency to 1x per year
- ❑ Re-constructing frames around SETs at all sites this year



# Reforestation



- ❑ Implemented first season of QAPP monitoring methods
- ❑ Chapel Green community planting
  - ❑ 1 acre mini forests - Mar 2024
  - ❑ Adding 1 acre mini forests - Dec 2024
- ❑ Stockley
  - ❑ 6.5 acres mini forests - Jan 2024
  - ❑ 21.5 acres hedge-row forest - Mar 2024
  - ❑ 1 acre filter strips - May 2024
- ❑ Oak Crest Farms
  - ❑ Upcoming 6 acre planting - Spring 2025
- ❑ Publication: Applied Nucleation for Forest Recovery in the Mid-Atlantic

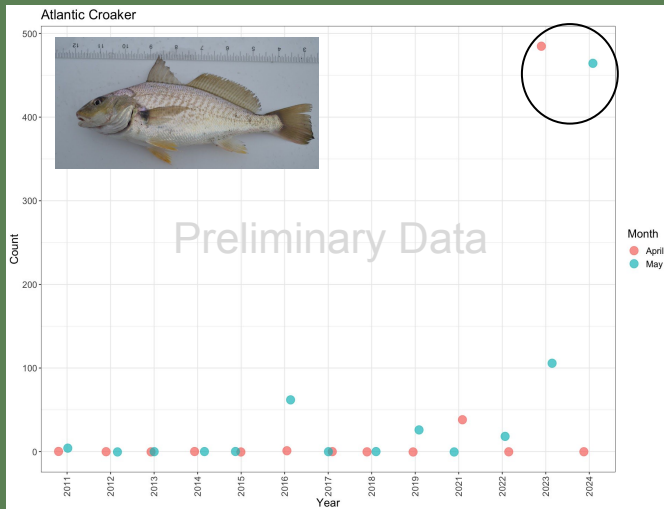




# Participatory

## Science

- reintroduction trapin counting tool (UD-WRC)
- 10th year of Horseshoe Crab Survey
- Fish survey finishing up its 13th year
  - Croaker and Spot observed earlier than normal this year



2024 Diamondback Terrapin Water-Based Survey Count

30th DELAWARE CENTER FOR INLAND BAYS

DO NOT pick up or touch diamondback terrapins. \*Statistics are required questions

Volunteer 1 Information

Volunteer 2 Information

Choose your survey type below.\*

Please select:

Date and time of the report\*

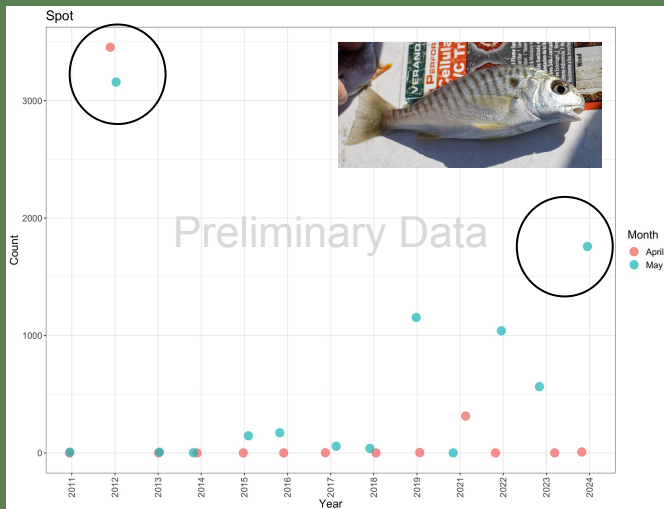
MM/DD/YYYY

Month

Weather

Cloud Cover\*

Please select:







# THANKS!

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