

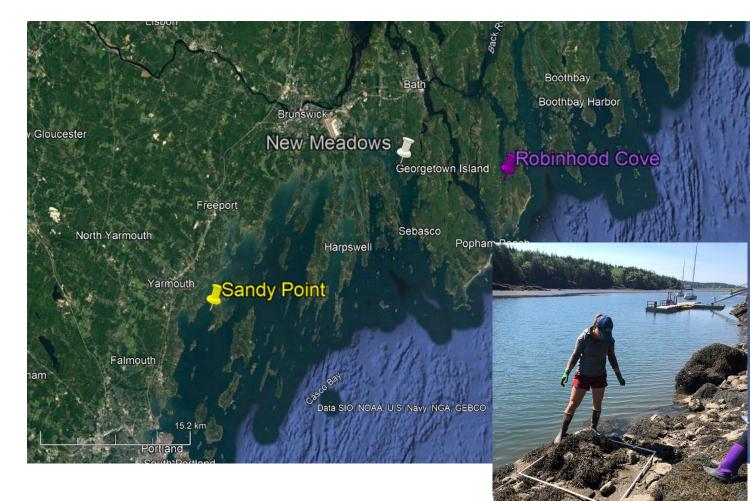
# A crabby coast: monitoring green and blue crabs in the Gulf of Maine

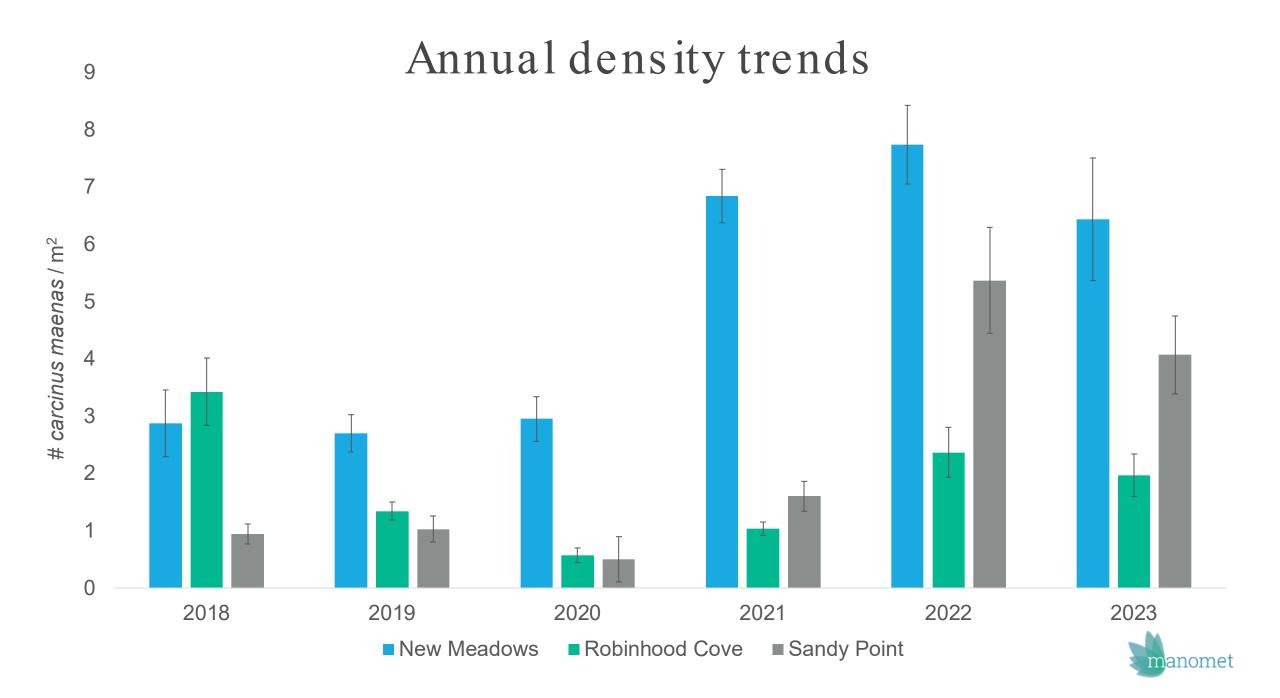
Jessie Batchelder & Marissa McMahan Manomet



### Long-term monitoring

- Standardized protocol
- Understand changing populations
- Management implications
- Habitat impacts
- Open-access dataset





### Green Crabs & Eelgrass

- Impact of crabs on eelgrass
- Trap surveys
- Mackworth Island & Broad Cove
- In coordination with other monitoring (water quality & eelgrass density)





## Goal: understand the distribution, abundance and habitat use of blue crabs



1. Trapping

### 2. Crowdsourcing



### Trapping in the New Meadows Lakes



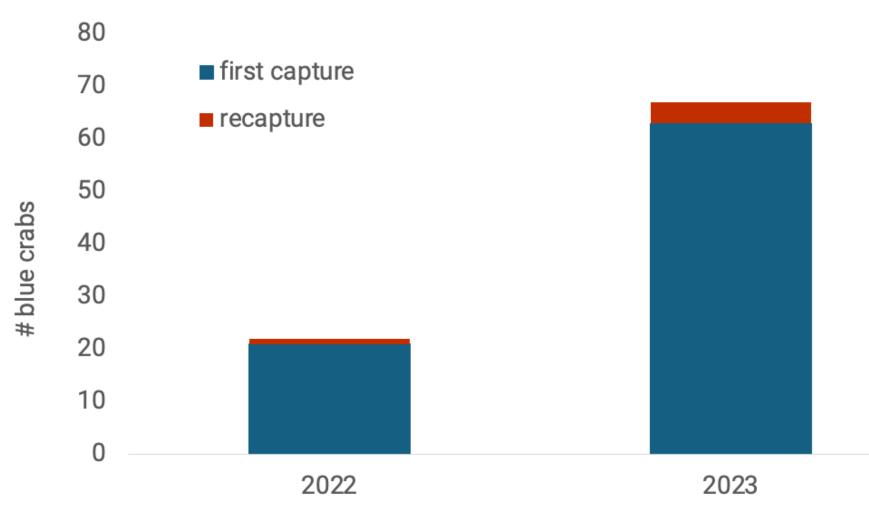




- Traps:
  - 2 traps
  - 2022 present
  - Late spring late fall
  - 7 day soak period
- Crab data:
  - Carapace width, sex, ovigery, molt status
- Tag & mark crabs



Trap Data - catch



- Crabs caught

   2022:22
   2023:67
- Recaptures

   2022:1
   2023:4
  - 2023:4
- Mostly males ° 8 females
- Mostly adults
  - Carapace width:
     ~150mm –
     170mm



### Crowdsourcing

- Trapping only samples a small faction of the coast
- Target community & industry members through trusted relationships
- Rely on fisher/harvester/farmer knowledge



### Open Access Data: Blue Crab Sightings Dashboard

#### **Blue Crab Sightings**

2018

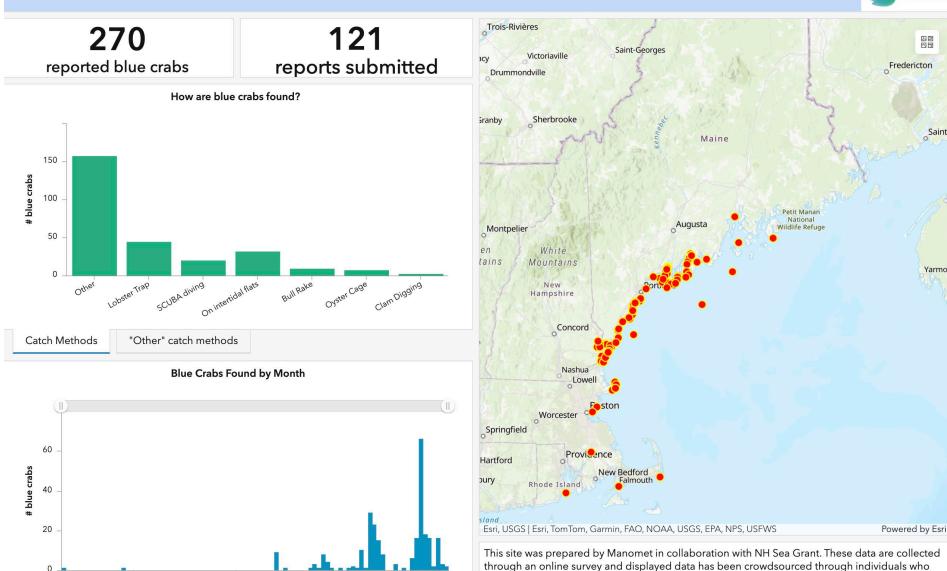
2020

2022



Saint

Yarmou



2024

have observed Blue Crabs.

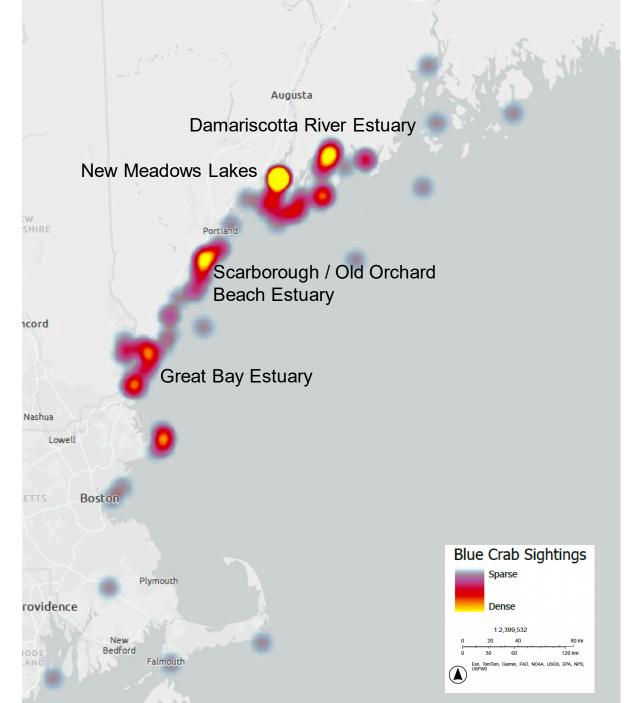
#### **VIEW BLUE CRAB OBSERVATIONS**

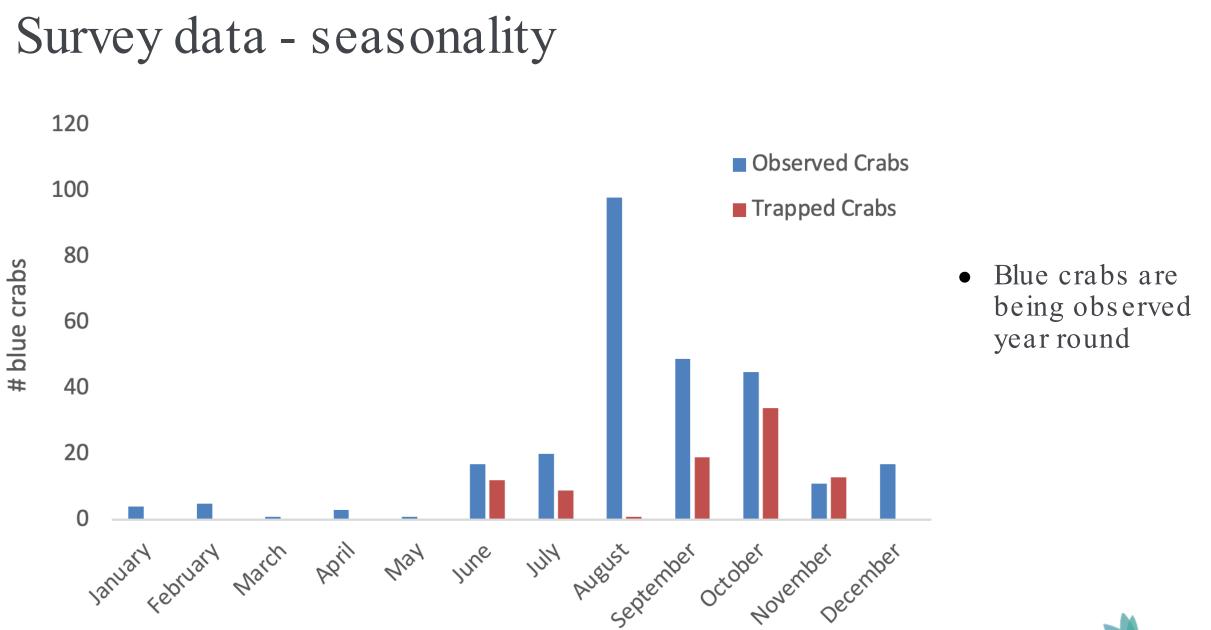




### Survey data - heat map

- Locations of blue crabs submitted through the survey
- More crabs in estuary systems
- Areas where we have conducted more outreach

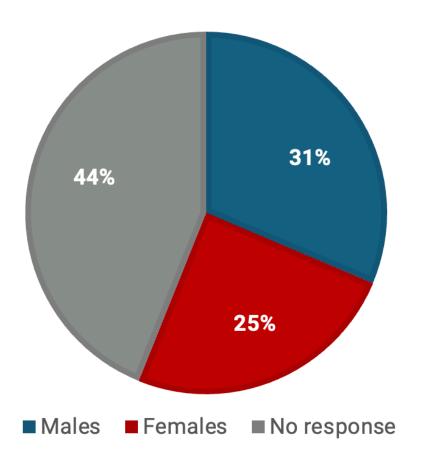




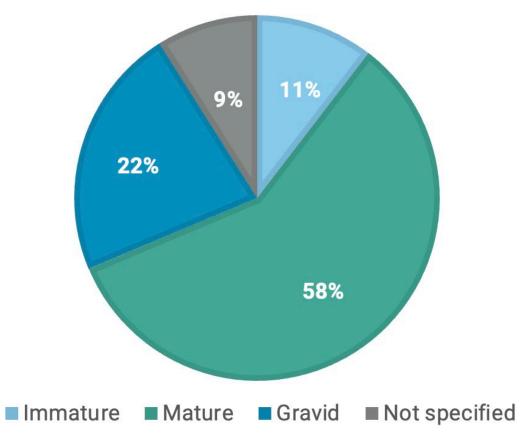
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### Survey data - sex

All crabs, n=271

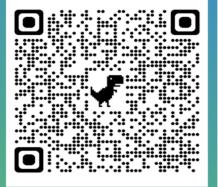


Female crabs, n=67





#### **REPORT A BLUE CRAB SIGHTING**



## Questions?

#### VIEW BLUE CRAB OBSERVATIONS



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