

Temporal and habitual assemblage of nekton community in Back Bay

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Objectives

- Determine species assemblage, along with abundance and diversity of nekton communities in Back Bay, Biloxi, MS: an understudied brackish environment (0-12 ppt).
- Assess marsh and SAV habitat usage by the nekton community.

Field methods

- Study sites: five blocks 120m wide, adjacent to marsh habitat, sampled once a month for a year (Nov '20 - Nov '21).
- At each block, one seine pull of 20x10m and one fyke net placed over a 24 hr tidal cycle, across the seine net path on the marsh edge.

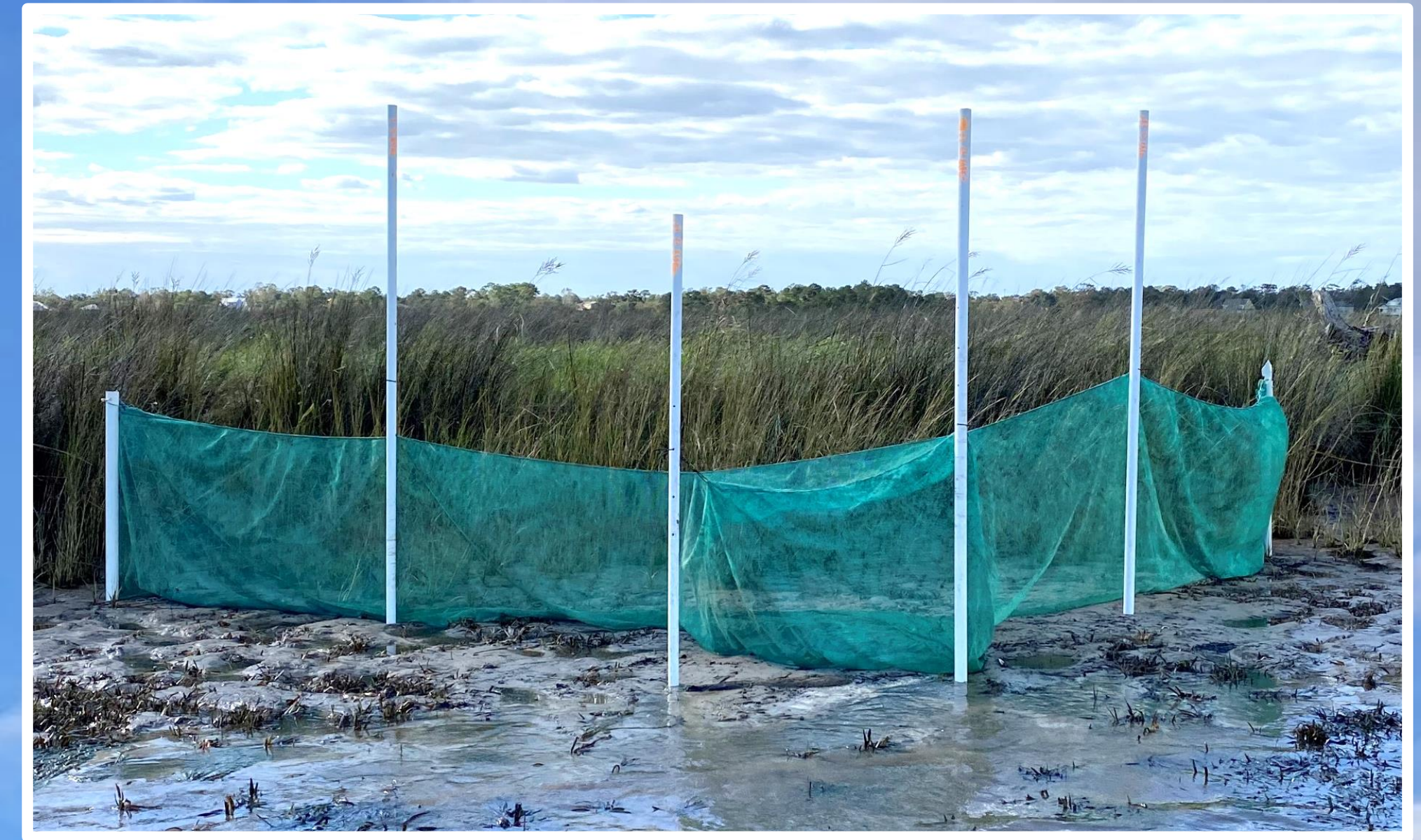


Fig 2. Fyke net at low tide.

Fig 1. Map of study sites.

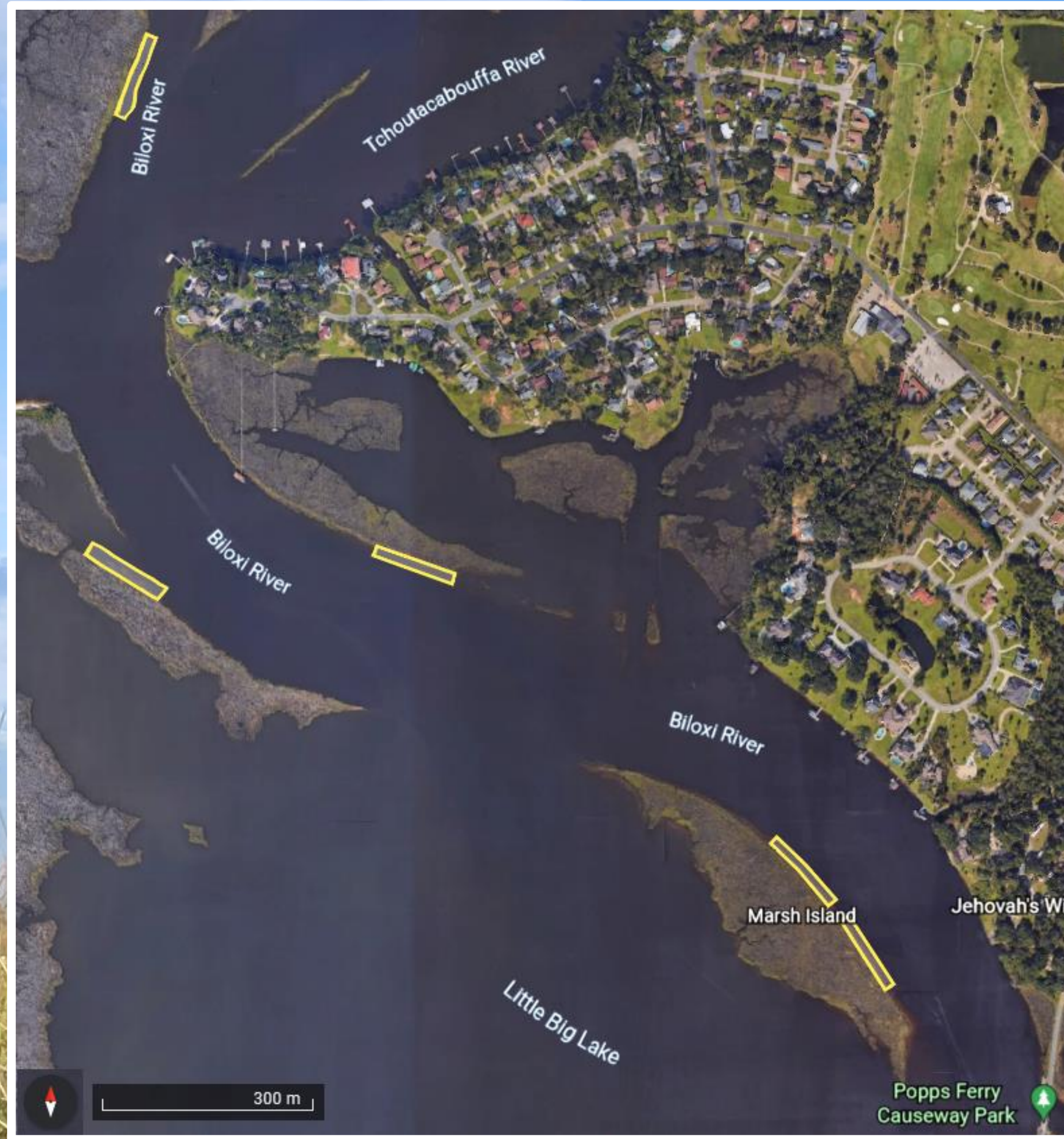
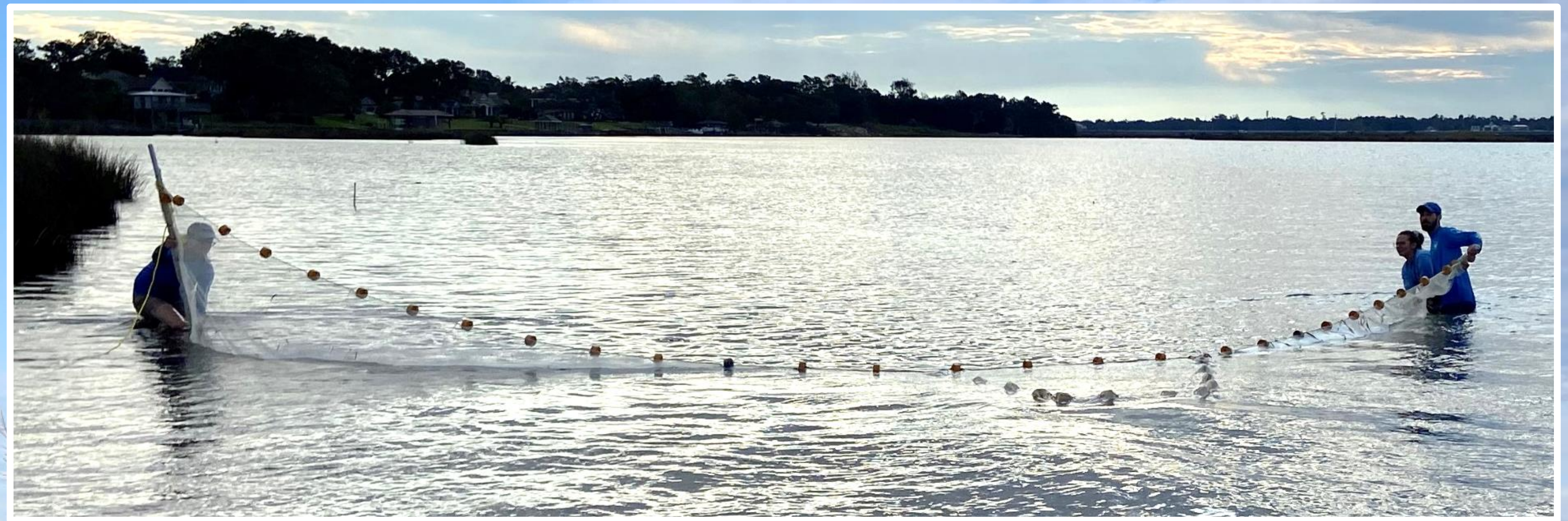


Fig 3. Seine net pulled at high tide.



Lab methods

- Fish and invertebrates processed in lab by site to determine species, standard length, and wet weight.

Results to Date

- Preliminary sampling has uncovered 27 nekton species in this habitat, with some species having suggested habitat preferences.

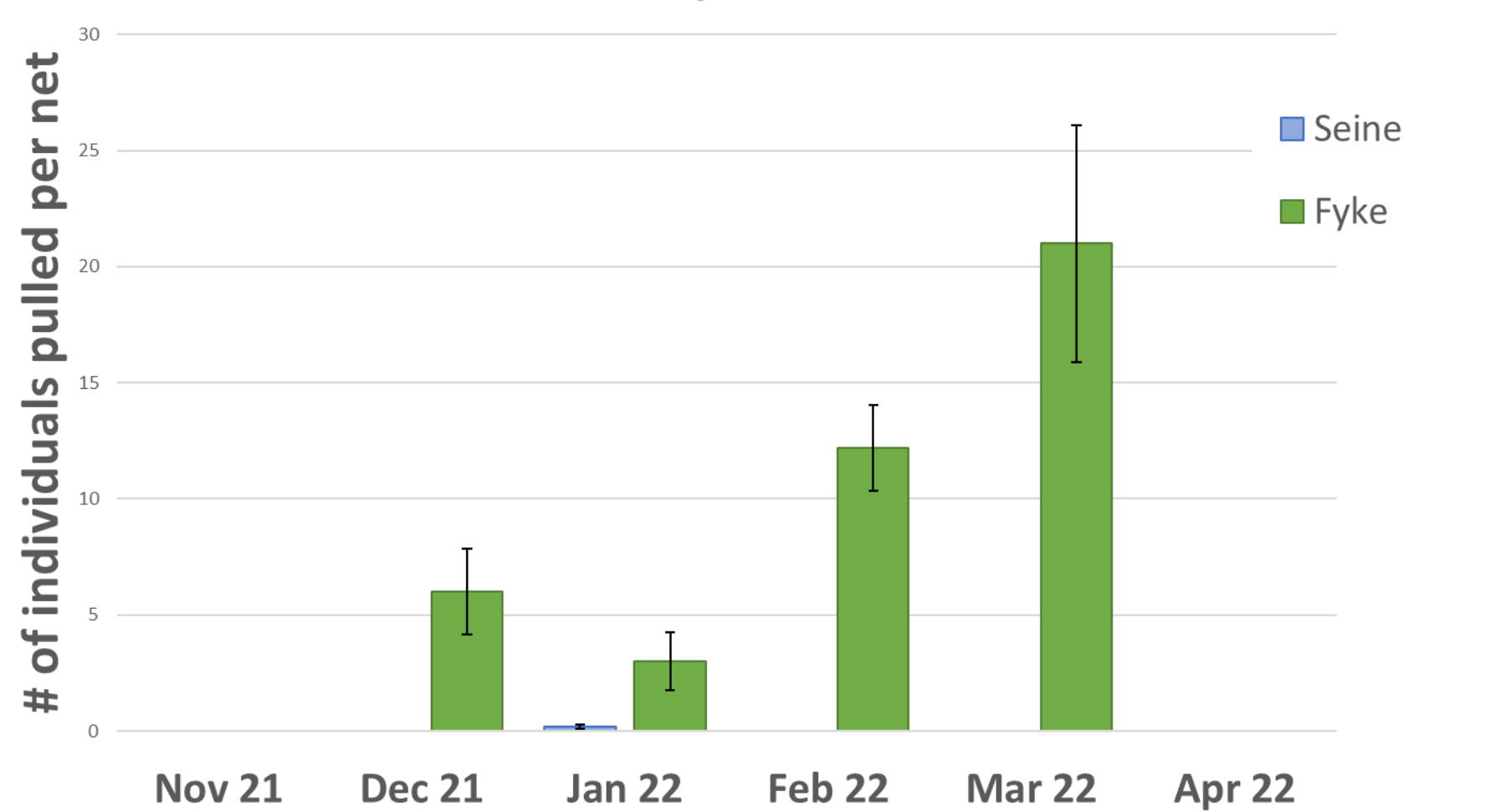
Bayou topminnow (*Fundulus pulverosus*)



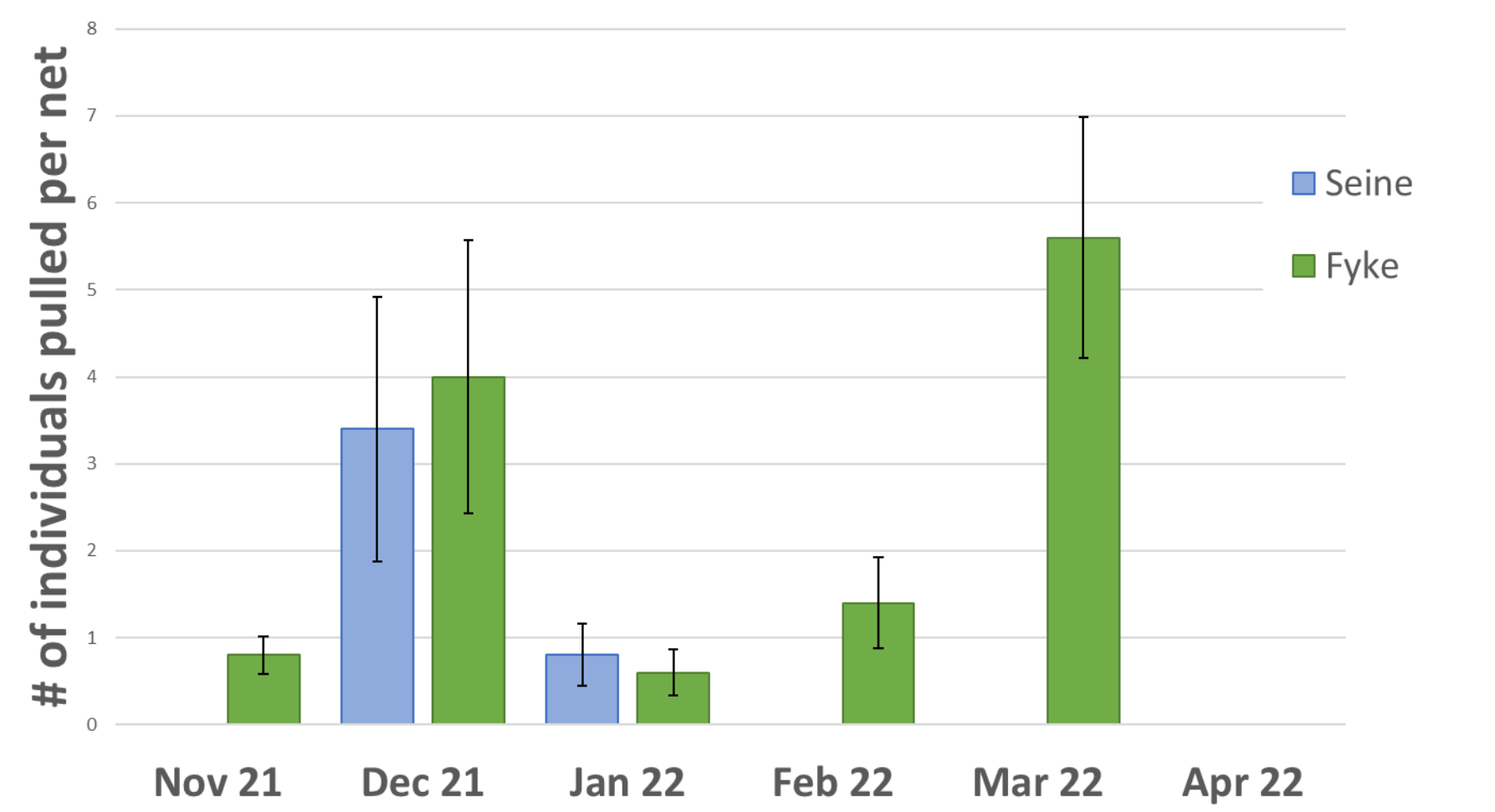
Gulf killifish (*Fundulus grandis*)



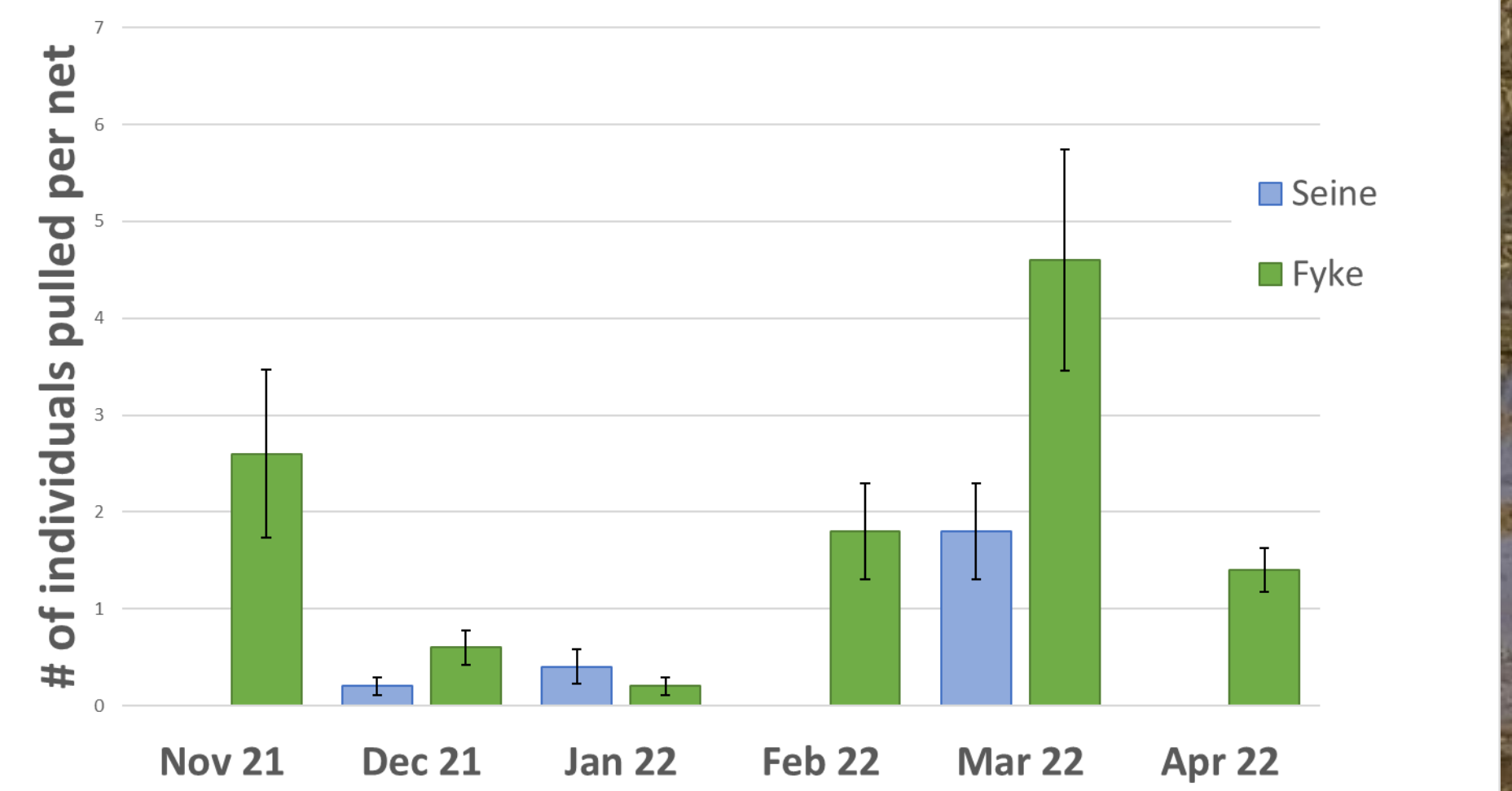
Fundulus pulverosus abundance per month per habitat



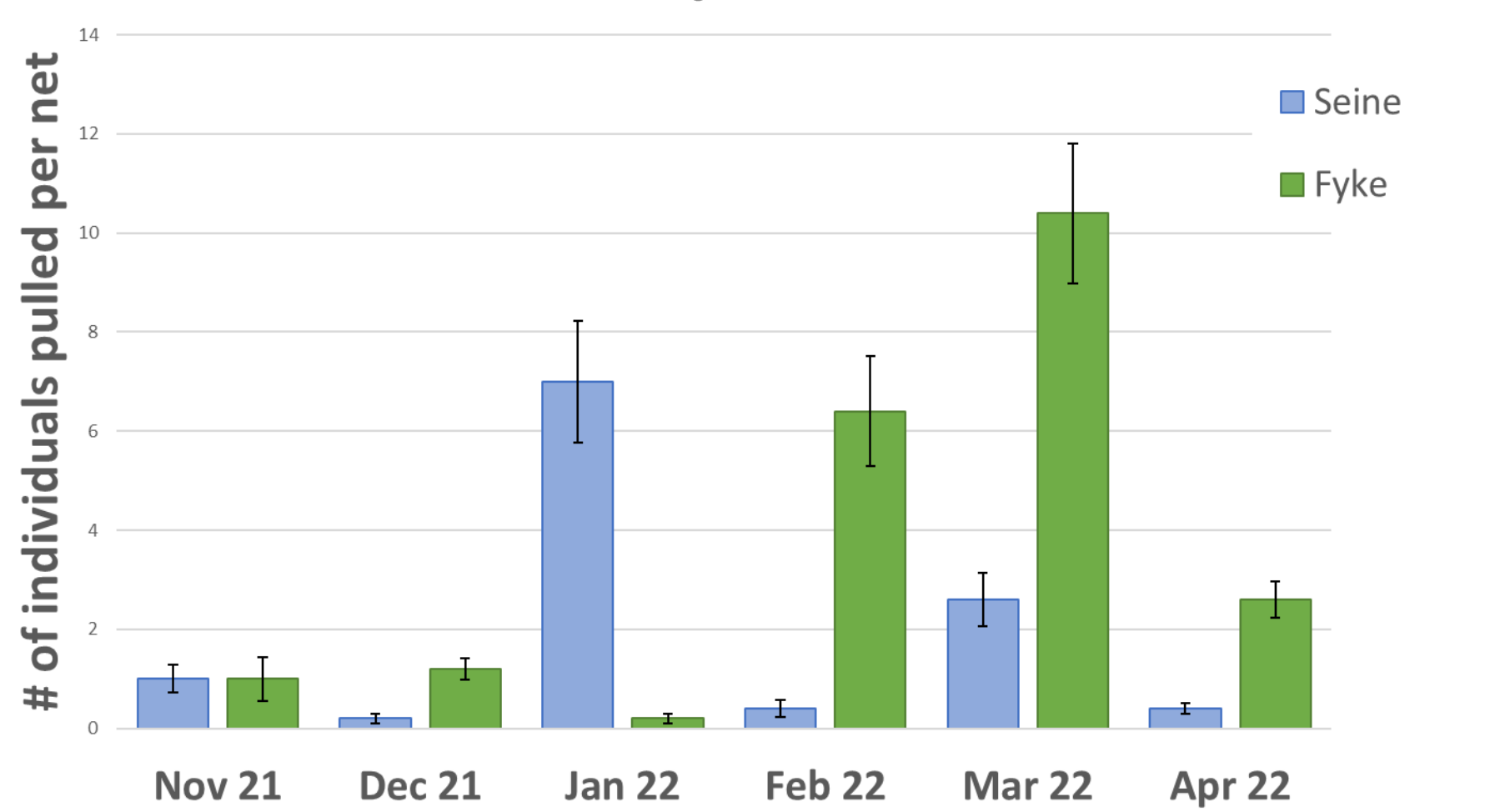
Fundulus grandis abundance per month per habitat



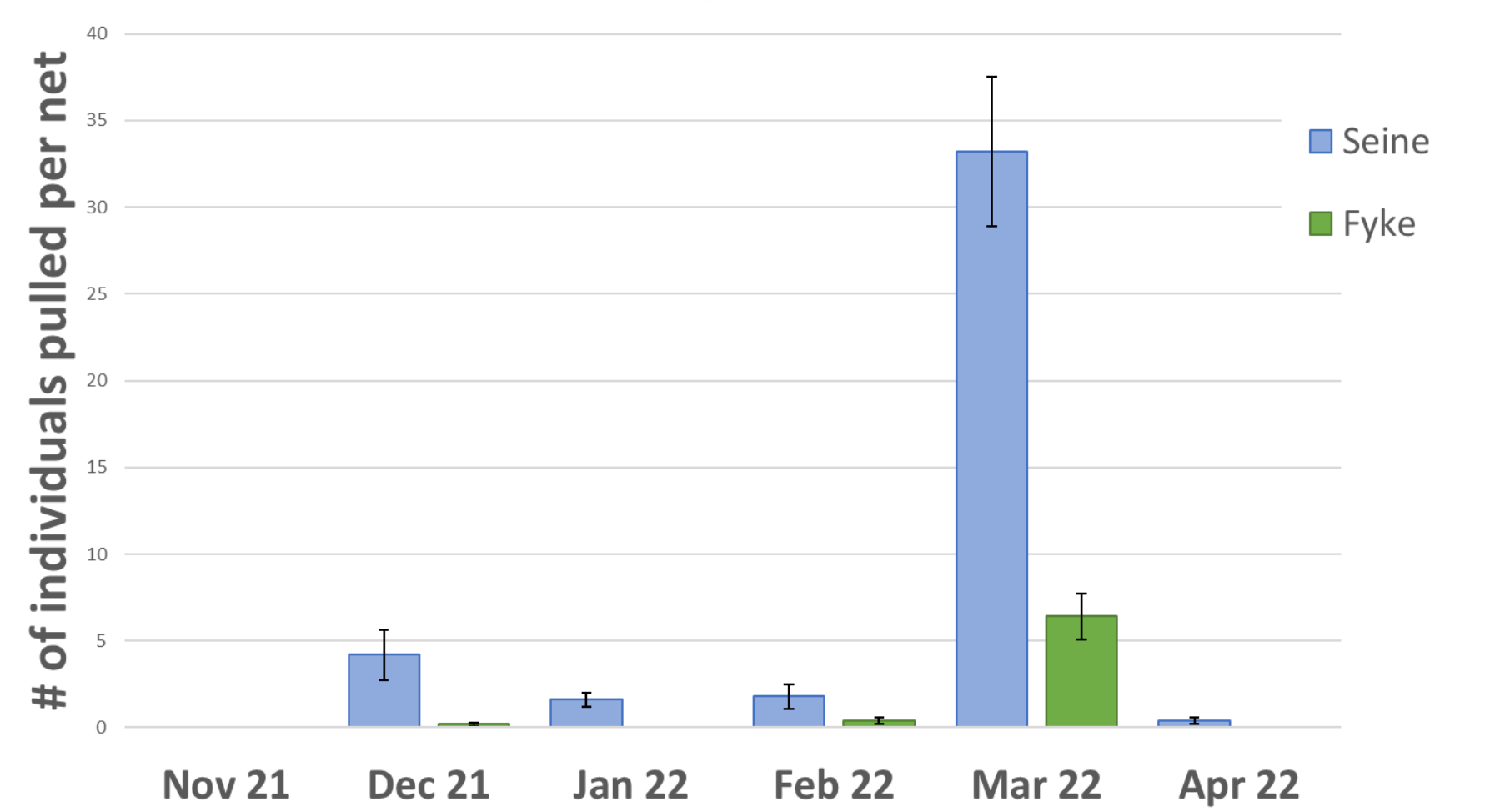
Ctenogobius shufeldti abundance per month per habitat



Callinectes sapidus abundance per month per habitat



Micropogonias undulatus abundance per month per habitat



Lepomis microlophus abundance per month per habitat

