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Determining Recruitment Timing and Distribution of American Eel (*Anguilla rostrata*) in Texas Utilizing Eel Ramps

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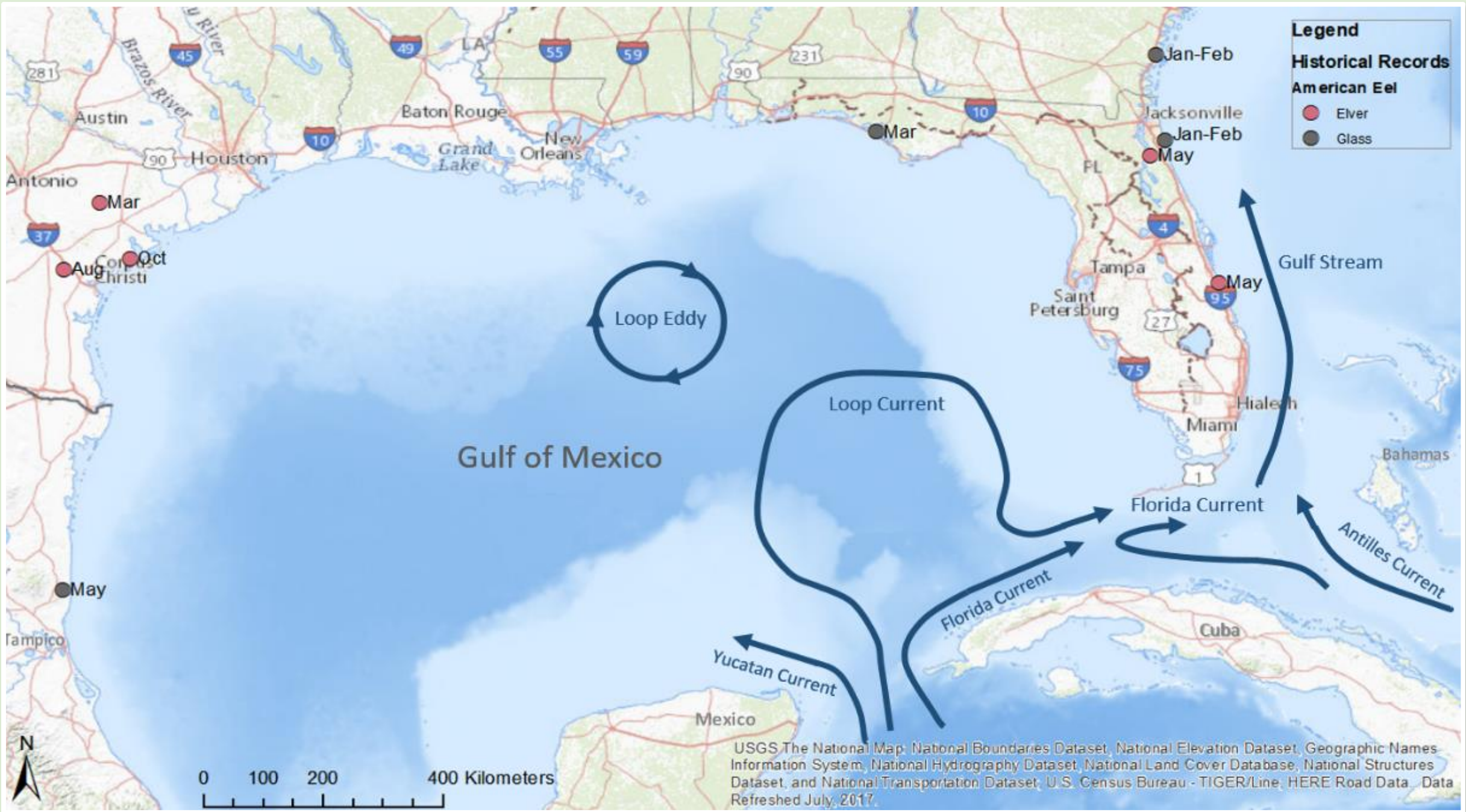
* Presenting Authors



American Eel Life Cycle



- Facultative catadromous fish
- Semelparous
- 6 distinct life stages



Objectives

- Temporal recruitment window
- Distribution throughout the Upper Texas Coast
- Test efficiency of eel ramps in Texas



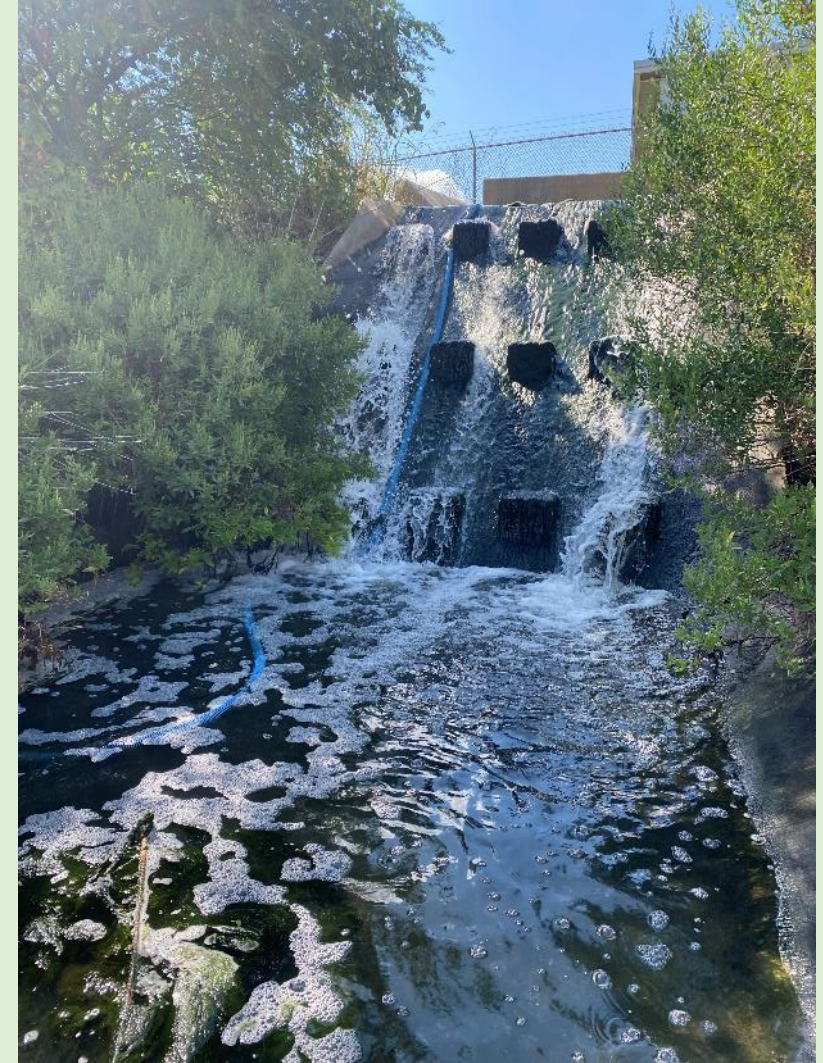
Eel Ramp

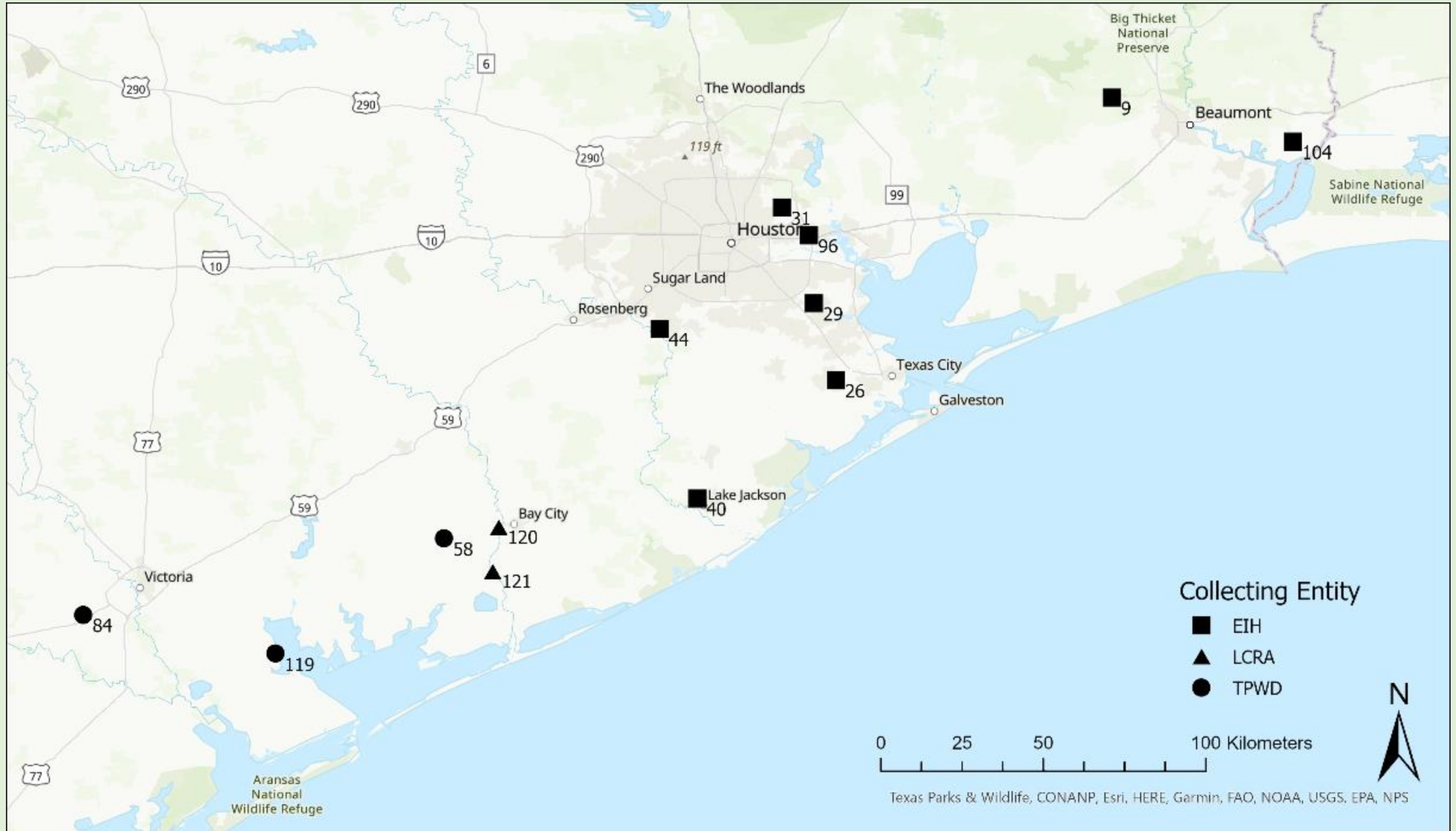




Site Selection

- 1 foot drop in streambed
- Support eel ramp
- Connectivity to coastal waters
- Previous sub-adult American Eel documentation
- Maximized spatial distribution throughout study area





Collecting Entity

- EIH
- ▲ LCRA
- TPWD



Texas Parks & Wildlife, CONANP, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS

Ramp Checks

- Sites checked weekly for 1 year
- Data collected
 - Water quality
 - Ramp angle
 - Catch
- Maintenance



Flow



Flood Events

Ramp



Displaced



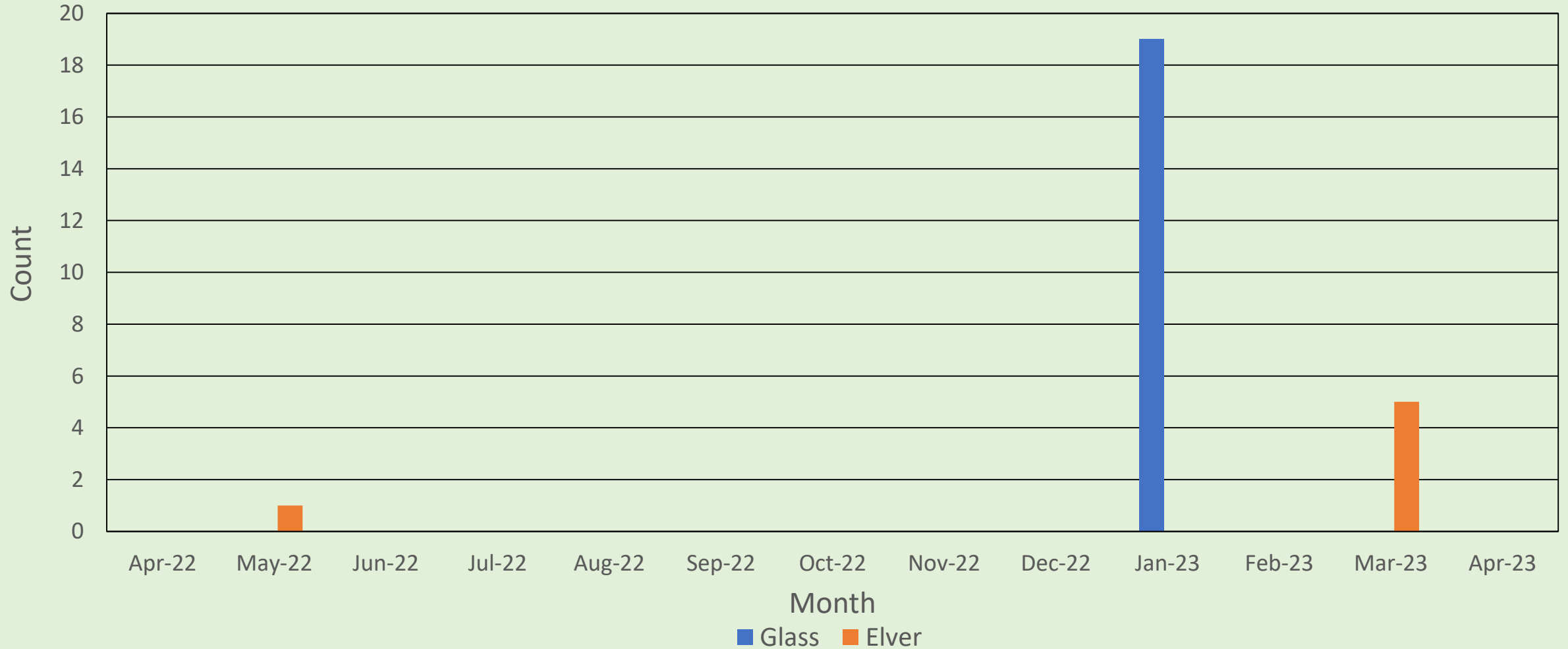


Preliminary Results



Family	Catch
Anguillidae	25
Aphredoderidae	1
Centrarchidae	10
Cichlidae	3
Cyprinodontidae	20
Elassomatidae	14
Eleotridae	14
Fundulidae	25
Ictaluridae	15
Mugilidae	1
Percidae	40
Poeciliidae	288
Clupeidae	1
Total	457

American Eel Recruitment Window



American Eel Distribution



Discussion

- Recruitment window
January to May
- Lacking distribution
data
- Successful
documentation of
juvenile American Eels



Going Forward

- June 2023
- Eels retained for analysis



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