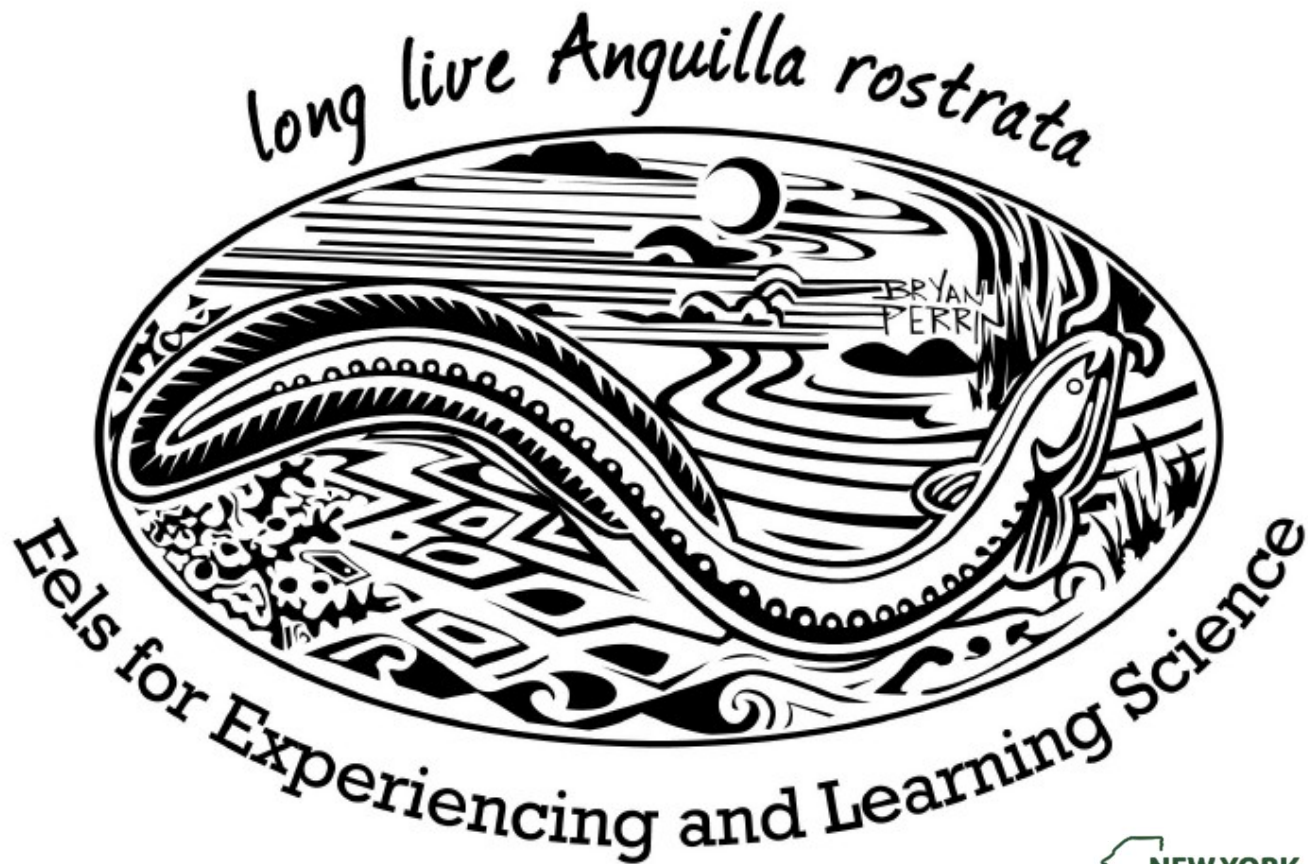


Shattering the Glass Eeling

Fish conservation through citizen science



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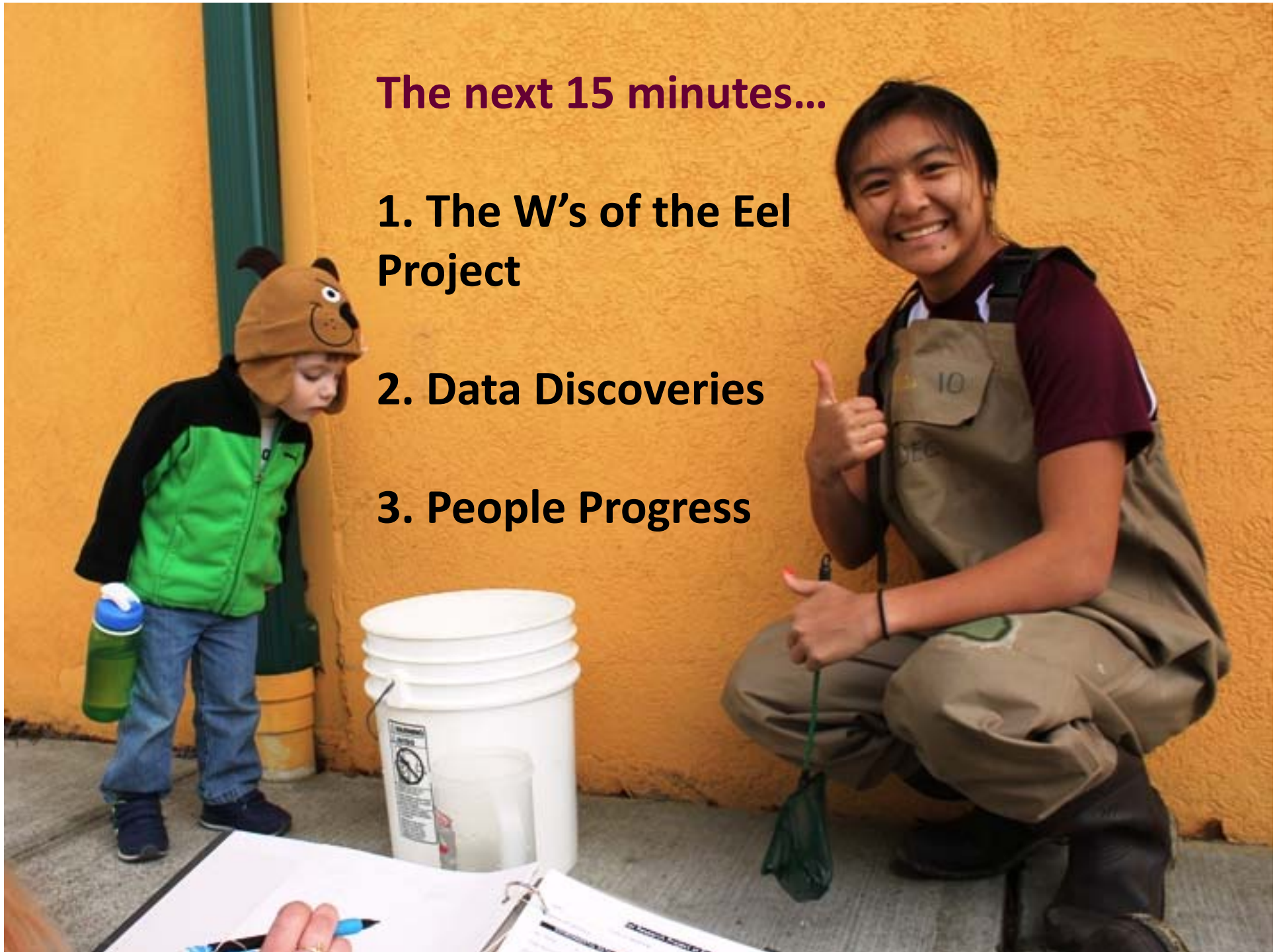


The next 15 minutes...

1. The W's of the Eel Project

2. Data Discoveries

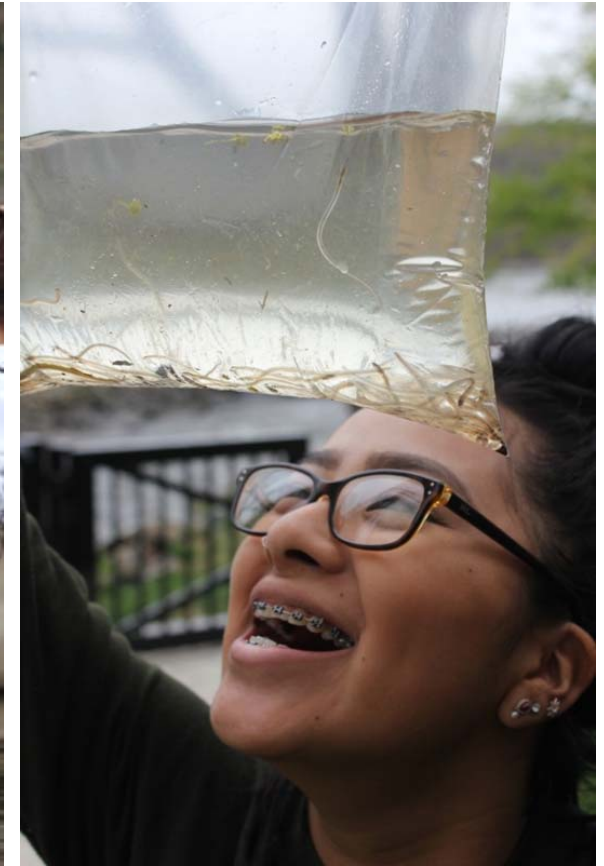
3. People Progress







When and where are glass eels arriving?



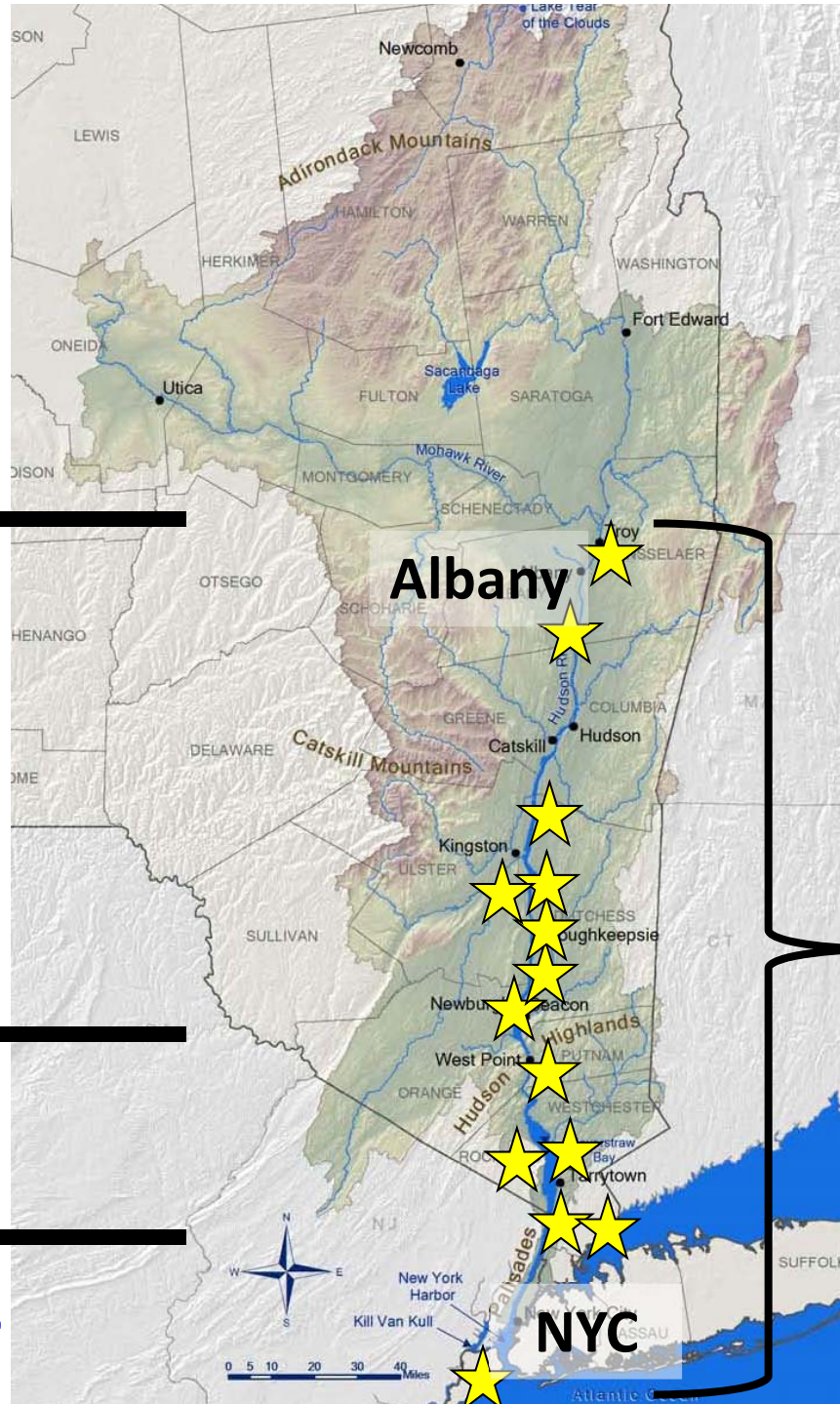
- Each spring, nets are placed in the mouths of streams
- Teams of trained volunteers catch, count, and release eels
- Project follows ASMFC protocols

Eel Project Sites Spring 2018

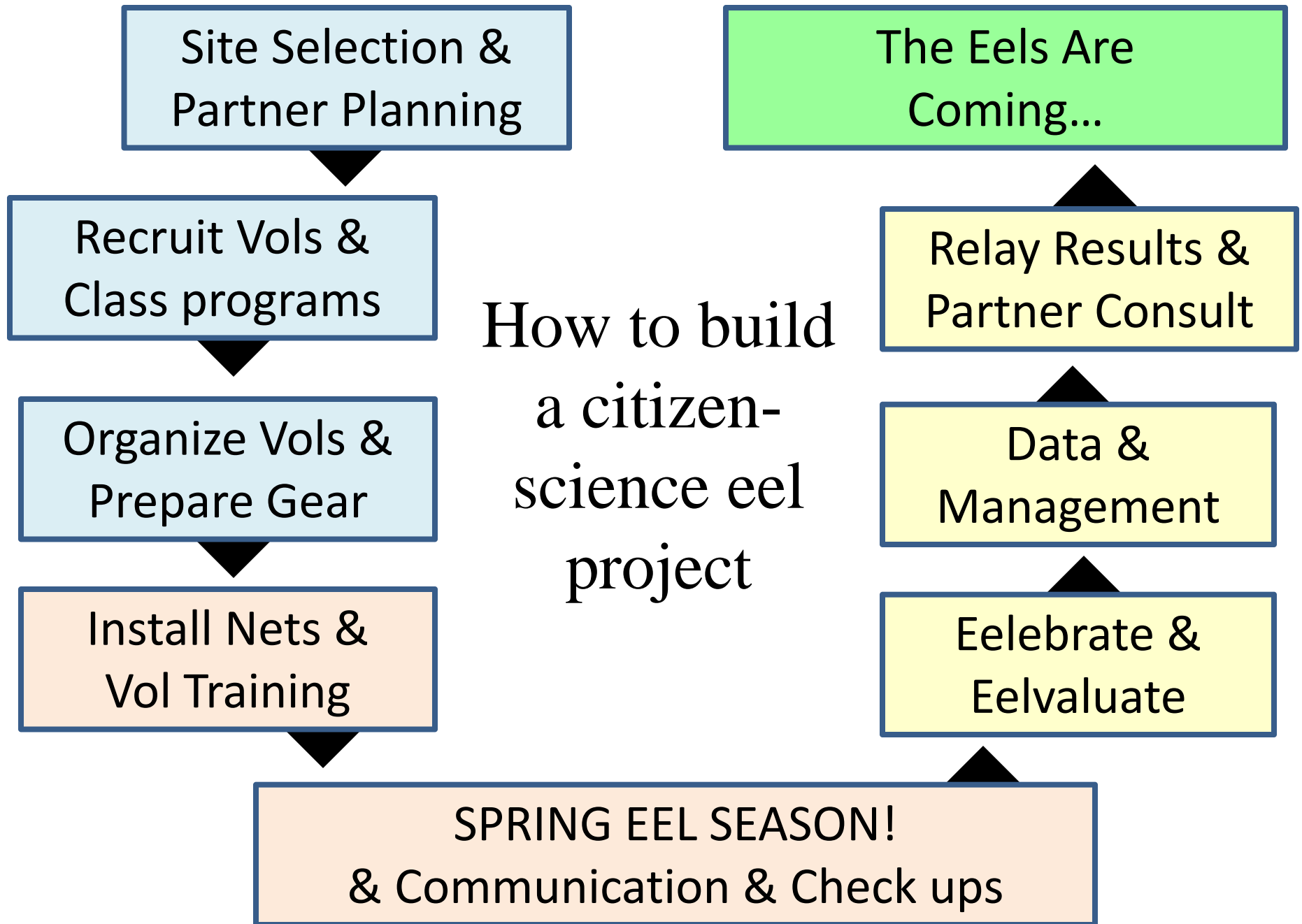
Freshwater

Brackish

Saltwater



160 miles of
tidal estuary



Site Selection &
Partner Planning

The Eels Are
Coming...

Recruit Vols &
Class programs

Organize Vols &
Prepare Gear

Install Nets &
Vol Training



Relay Results &
Partner Consult

Data &
Management

Ecelebrate &
Eelvaluate

SPRING EEL SEASON!
& Communication & Check ups

Site Selection &
Partner Planning

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How to ensure high quality data from volunteers

- Specialized gear
- Straightforward protocols
- Simple data sheets
- Graphic guides
- On-going training



Is it a Glass Eel or an Elver?

The fyke net can catch both **glass eels**: eels that are just entering the Hudson, and **elvers**: eels that have been in the stream for a year or two



“Glass eels” and “elvers” are names for different ages of the **same animal, the American eel**

GLASS EELS

- Glass eels are about two inches long.
- Early in the season, they can be almost entirely see-through. Later into the season, they get darker.
- Head is a little wider than their body

ELVERS

- Elvers are larger (3-6 inches long).
- Elvers are a dark green or brown, with a lighter colored belly
- Head is same width as their body

These photos show how **glass eels** get darker through the spring

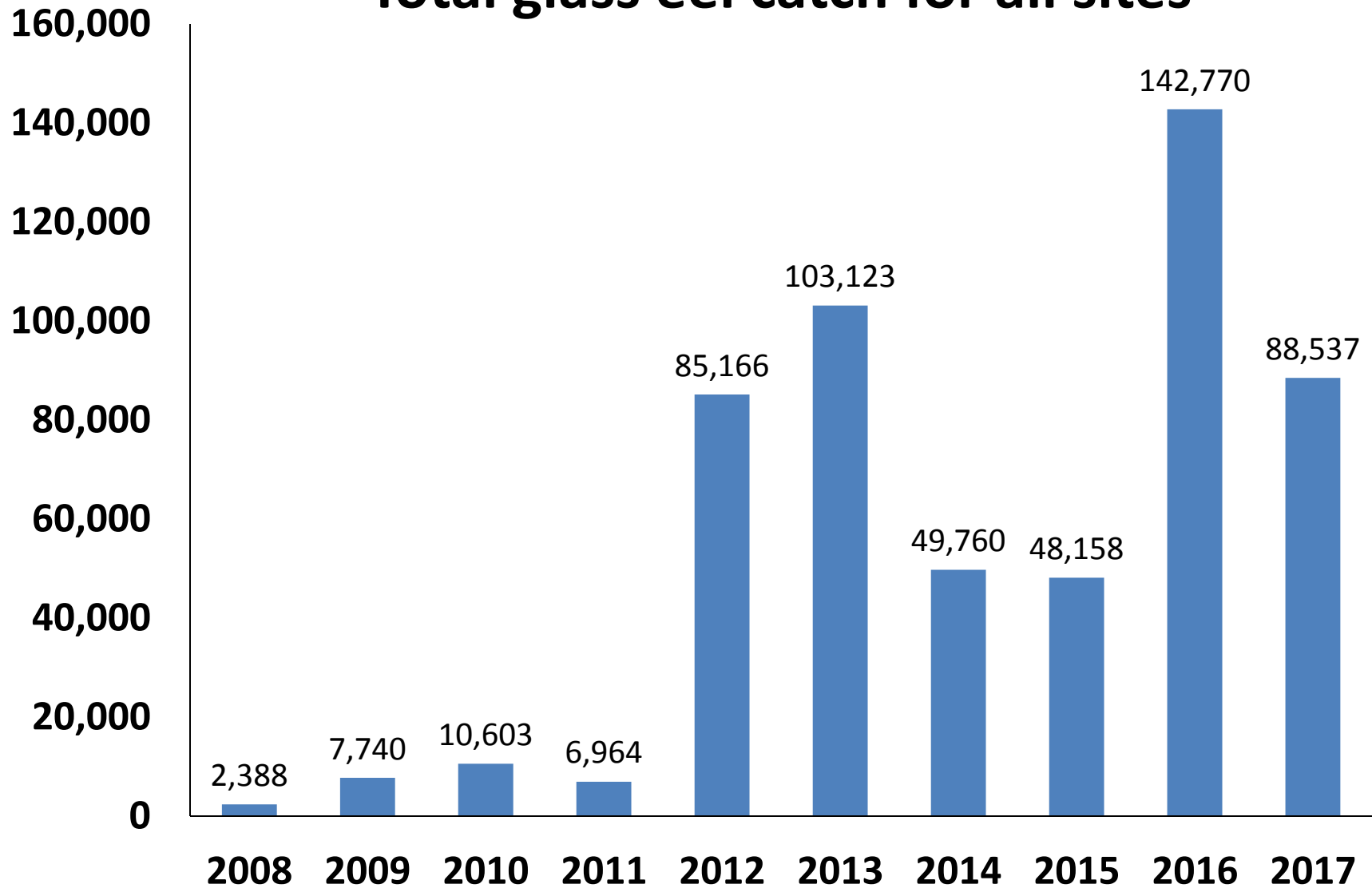


Early in season
(April)

Mid-late season
(late April, early May)

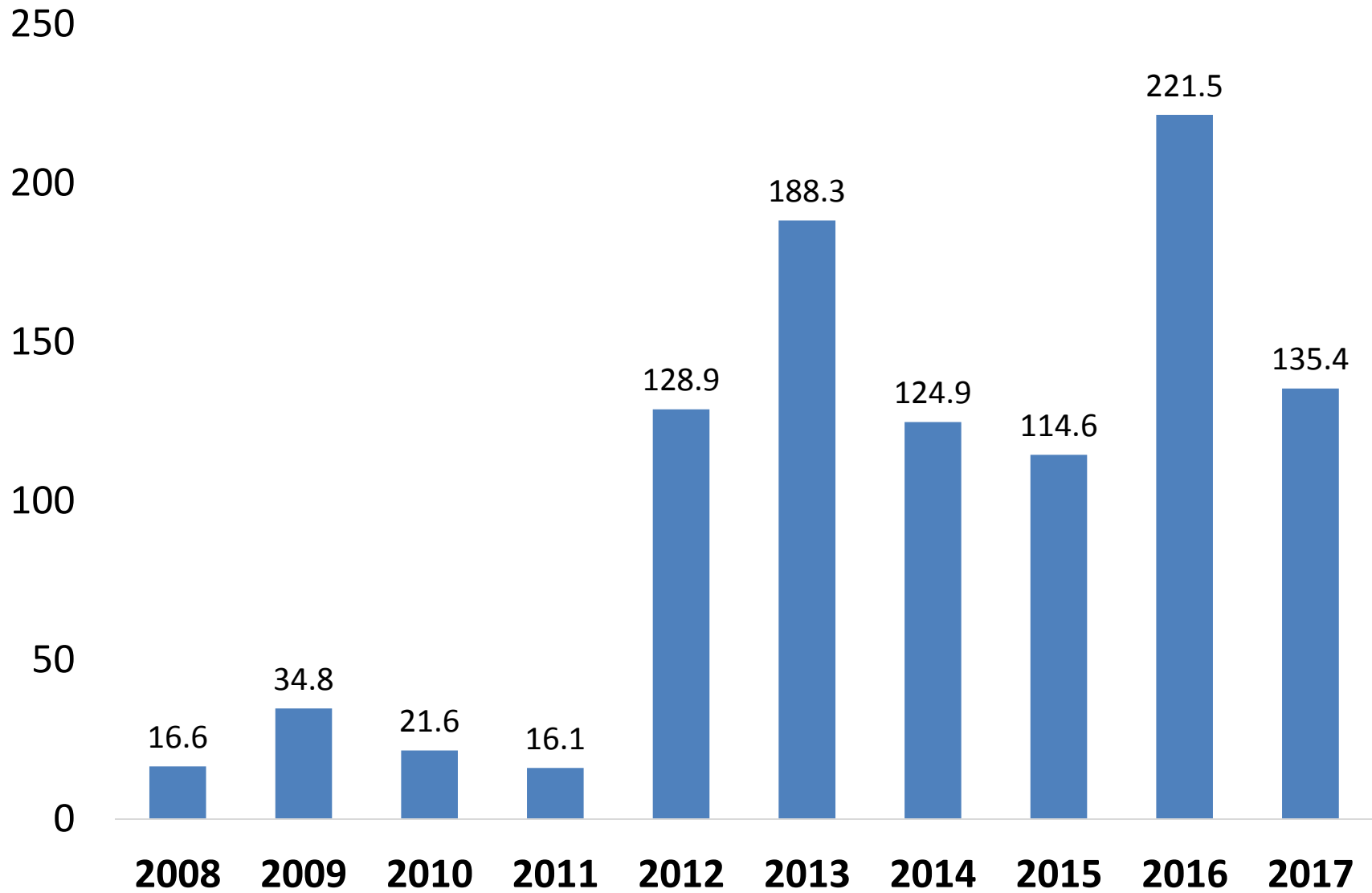
End of season
(May)

Total glass eel catch for all sites



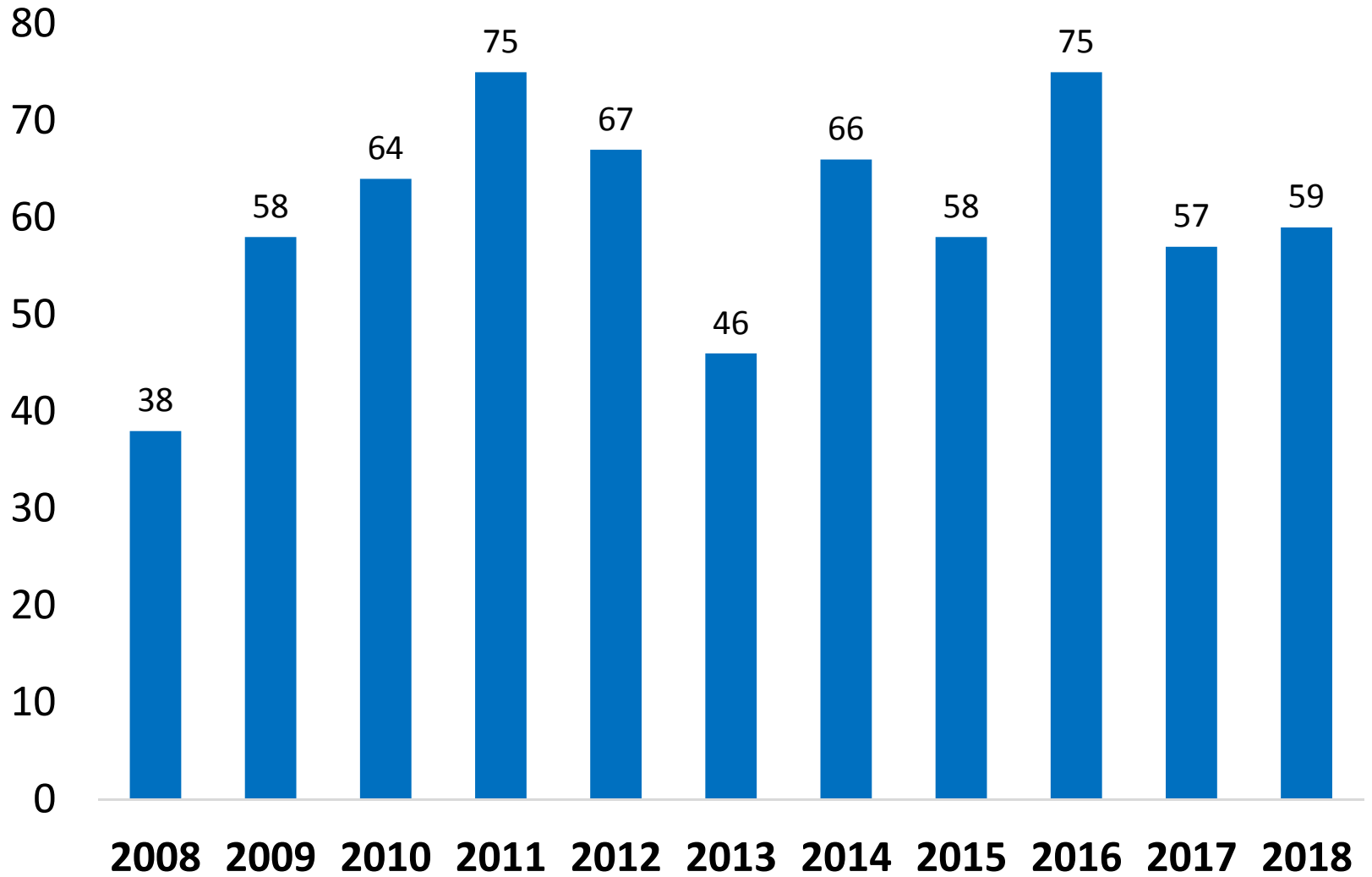
We've caught and released over 680,000 glass eels since 2008!

Average Glass Eels Caught Per Day Per Year



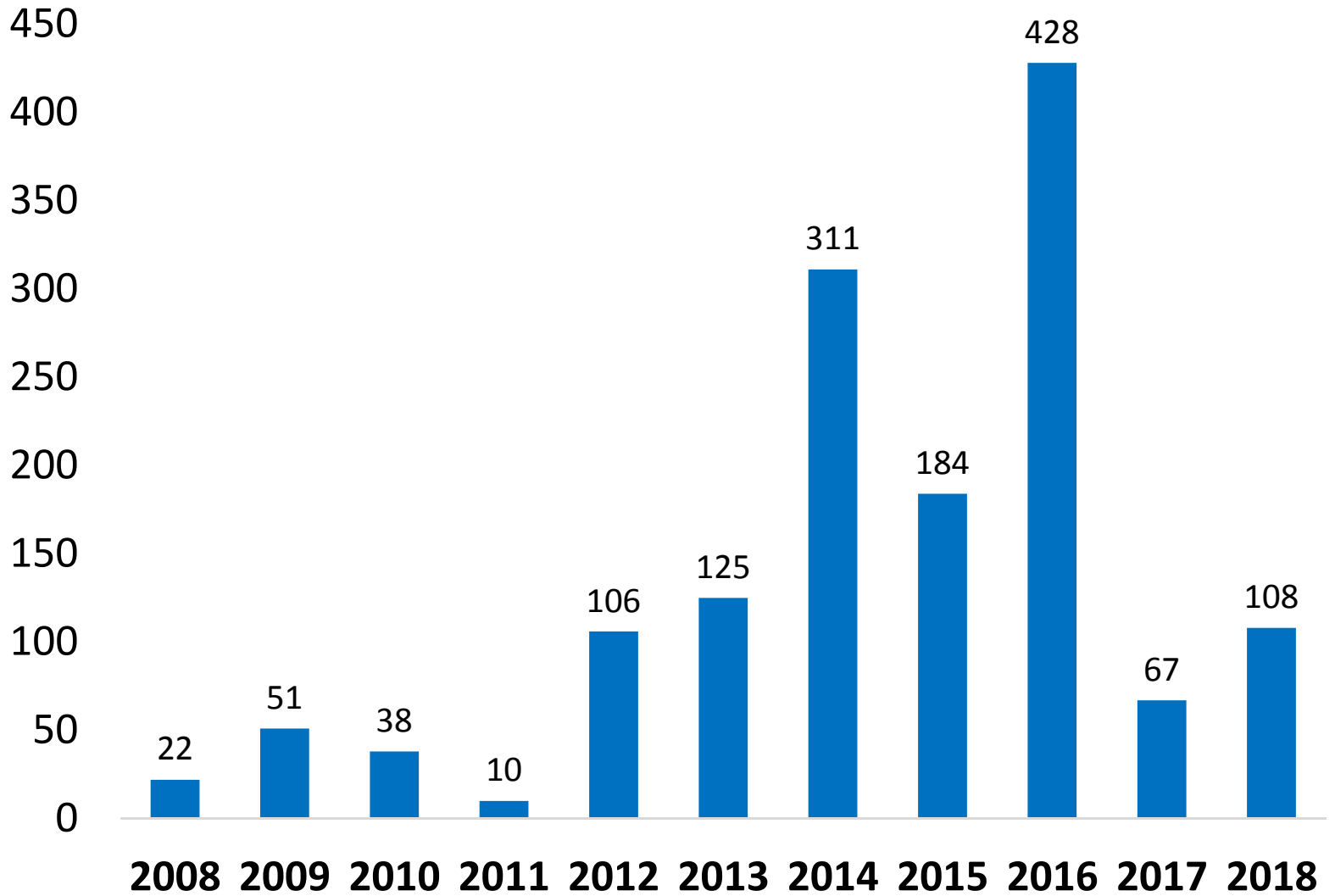


Average Eels/Day at Furnace Brook



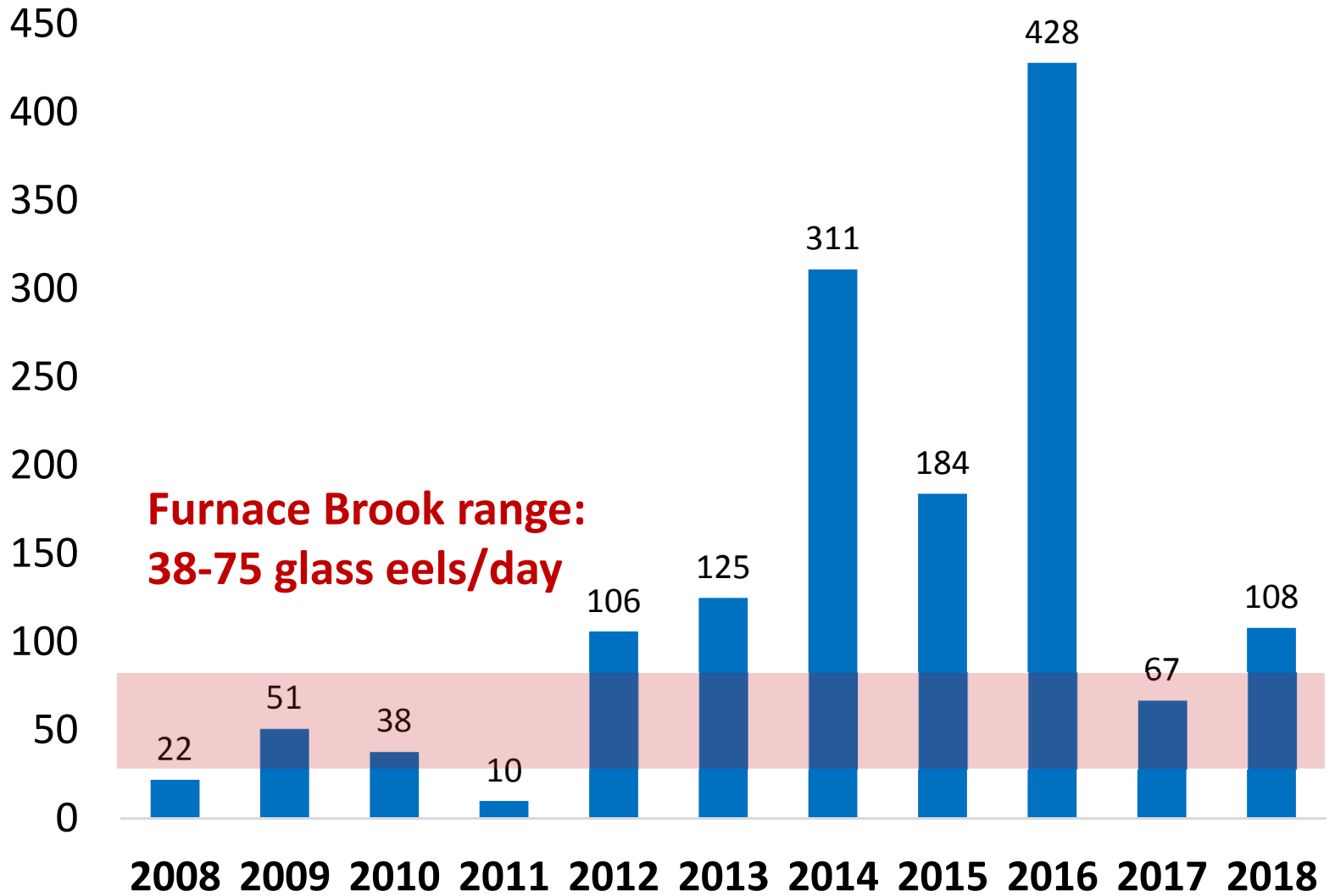


Average Eels/Day at Fall Kill

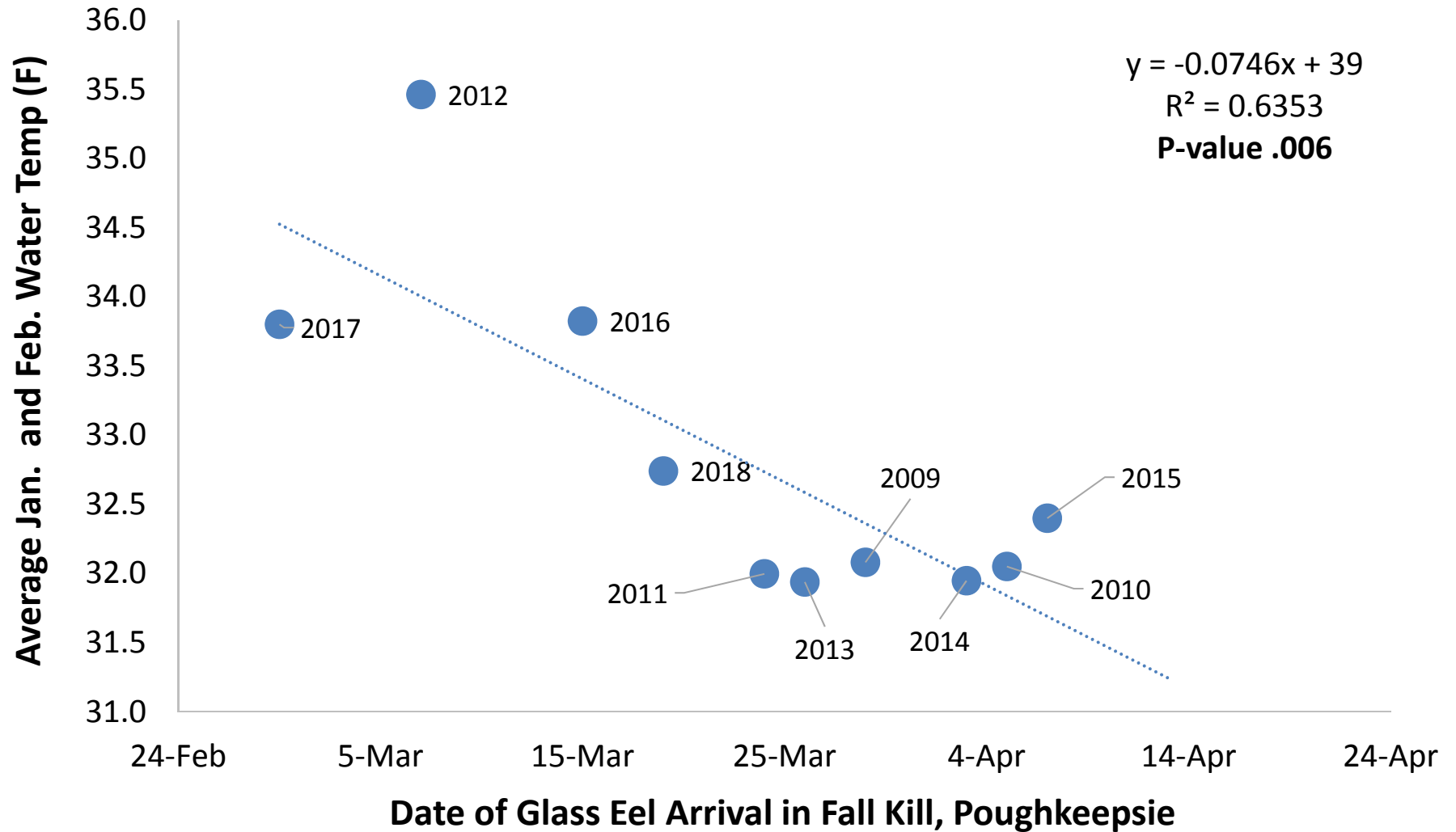




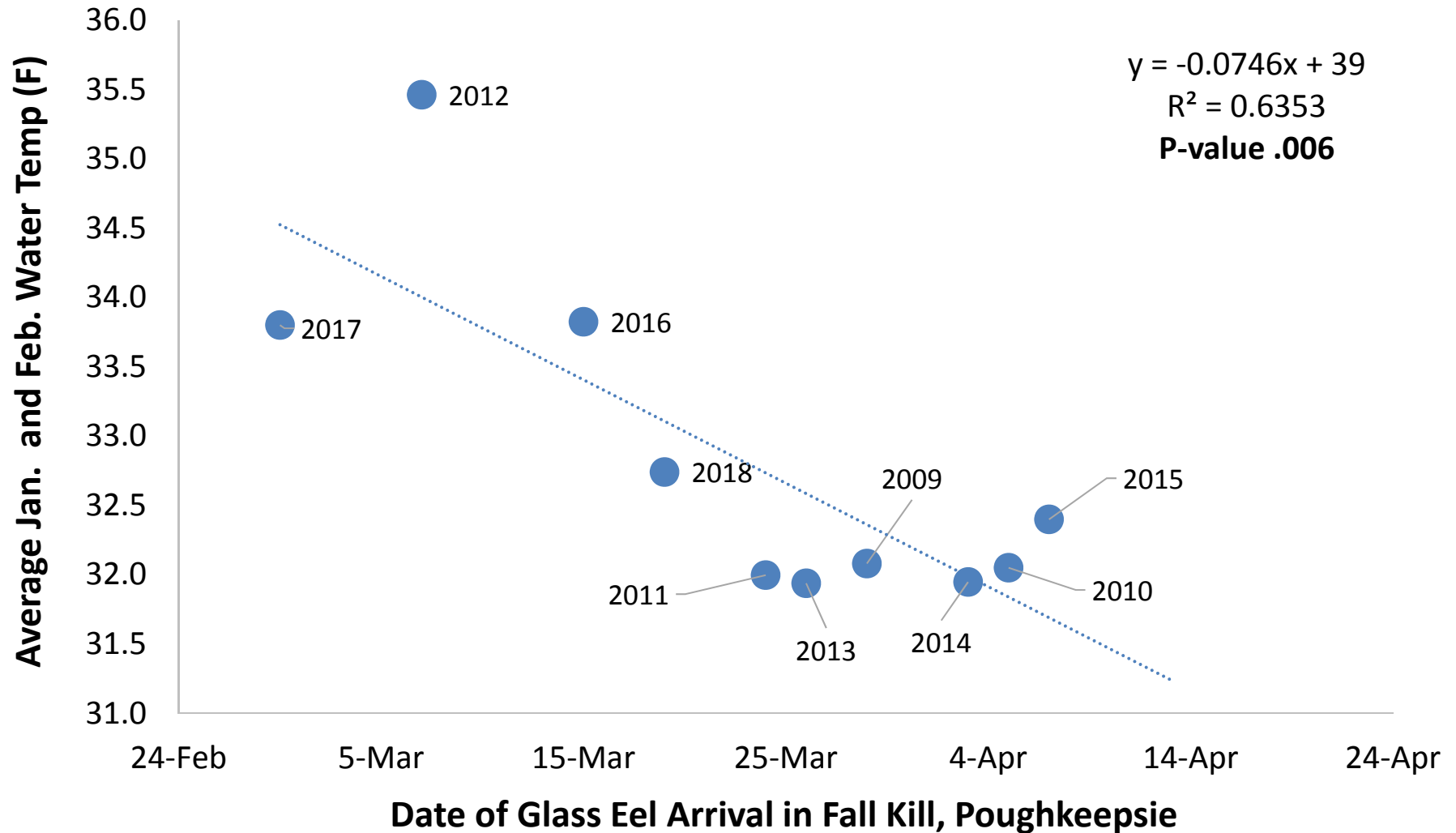
Average Eels/Day at Fall Kill



Predicting glass eel arrival



Predicting glass eel arrival



Estimated arrival: March 25th

Actual arrival: March 20th

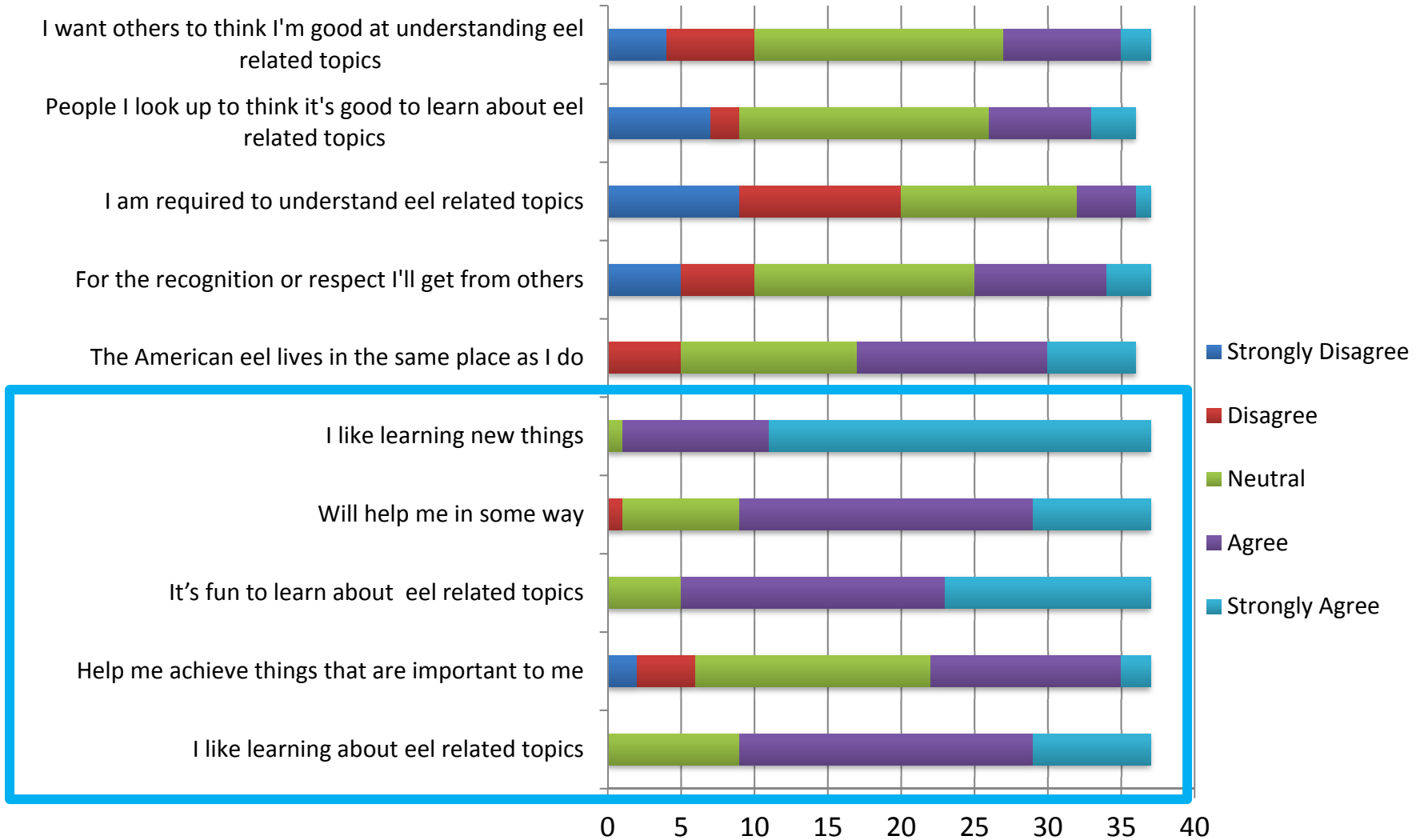
What makes eels ideal for citizen science?

- Charismatic subject
- Real conservation need
- Short migration season
- Likely to see an eel
- Diversity of habitats = diversity of audiences



Why do students participate in the eel project?

Why do you choose to learn and understand eel related topics?

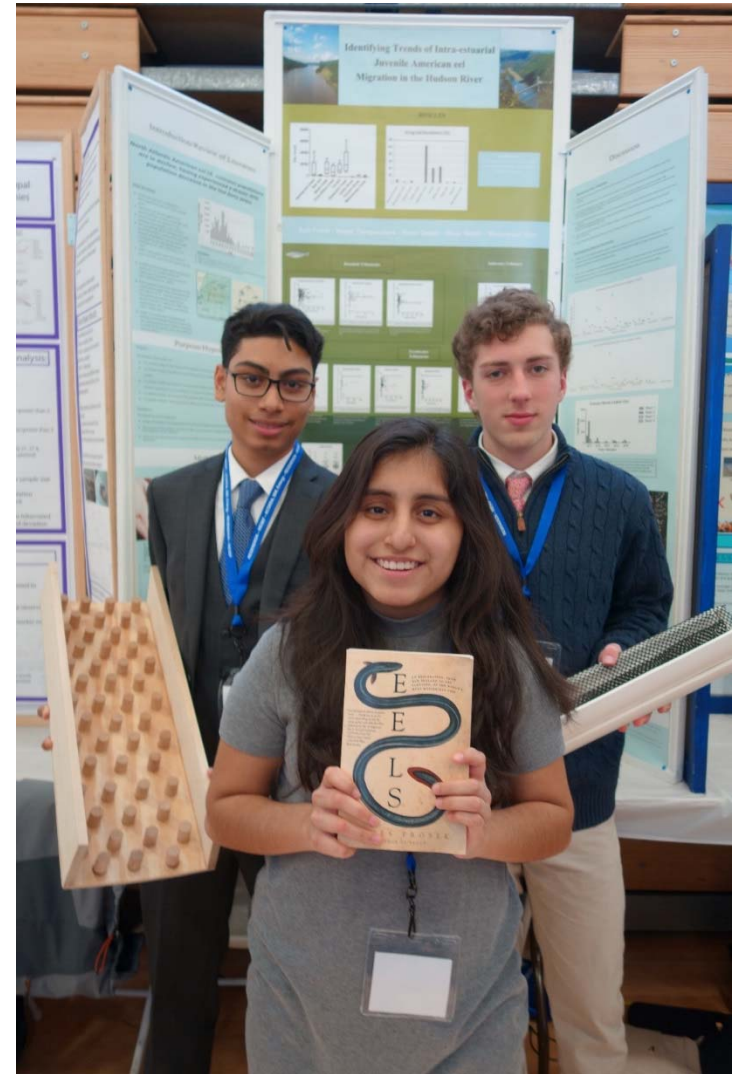
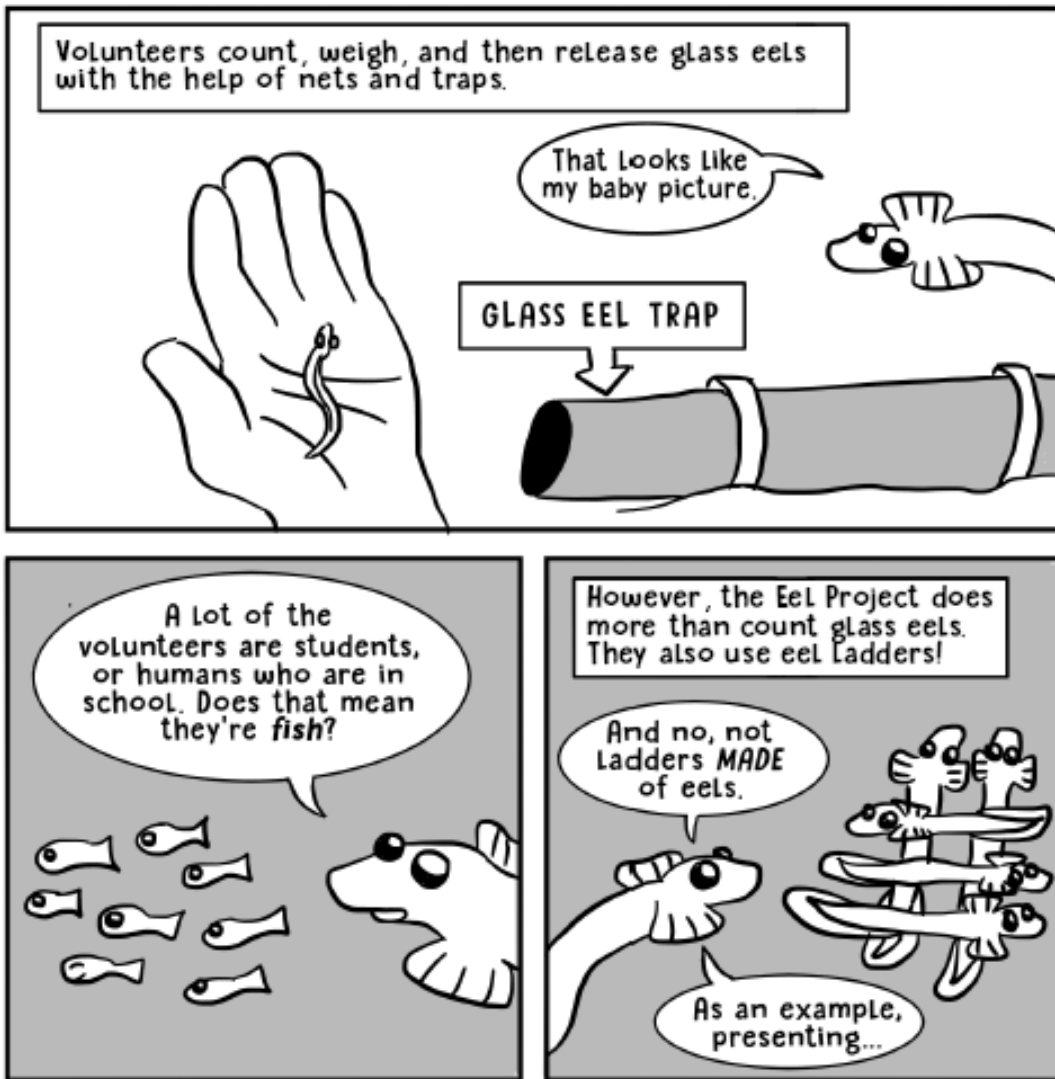


Eels in the Classroom
2,000 students and 400
adults attended eel
programs in 2018 (so far)



How to continue to keep volunteers engaged

Project ownership



How to continue to keep volunteers engaged

Project expansion



Stepping Stones of Stewardship



Ashawna Abbott, Aidan Mabey, Martice Smith

THANK YOU

Questions and comments?

long live Anguilla rostrata



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Grace Ballou gracewballou@gmail.com



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