The Hudson River Eel Project
Fish conservation through citizen science

Sarah Mount  sarah.mount@dec.ny.gov
March 11, 2020 Research in the Reserve
Migration story

Sargasso Sea

American eels (Anguilla rostrata) likely hatch here

Larvae move north on Gulf Stream currents

Glass eels arrive in estuaries

Eels grow for many years in rivers and streams

Adult silver eels return to the Sargasso to spawn
Glass Eel Sampling Sites Spring 2020
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.
How to ensure high quality data from volunteers

- Specialized gear
- Straightforward protocols
- Simple data sheets
- Graphic guides
- On-going training
We’ve caught and released over 900,000 glass eels since 2008!
Average Glass Eels Caught Per Day

- 2008: 16.6
- 2009: 33.3
- 2010: 25.4
- 2011: 17.2
- 2012: 132.2
- 2013: 164.8
- 2014: 94.1
- 2015: 98.9
- 2016: 225.7
- 2017: 125.4
- 2018: 184.7
- 2019: 292.2
Eels and Barriers
Eels Caught at Saw Kill

- Mouth (no barrier)
- Above waterfall
- Above dam
Eel ladders to get eels past dams (Jun-Oct)
“Eel-avatars” to get eels past dams

Sparkill, Piermont
Eels by Size at Saw Kill Ladder

- <7.5 cm
- 7.5-15 cm
- 15-30 cm
- >30 cm

Albany
NYC

Graph showing the number of eels at Saw Kill Ladder by size from 2006 to 2019.
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
Future Opportunities

Students and volunteers can and DO collect valid data

Citizen science can be vital to building our NEXT GENERATION of conservation leaders

Opportunity for discrete student projects at various levels

If you want to get involved in the eel project, get in touch with Sarah!
Thank you!
Questions?

Sarah Mount  sarah.mount@dec.ny.gov