

Utilizing Science to Support Conservation of the Endangered Atlantic Sturgeon

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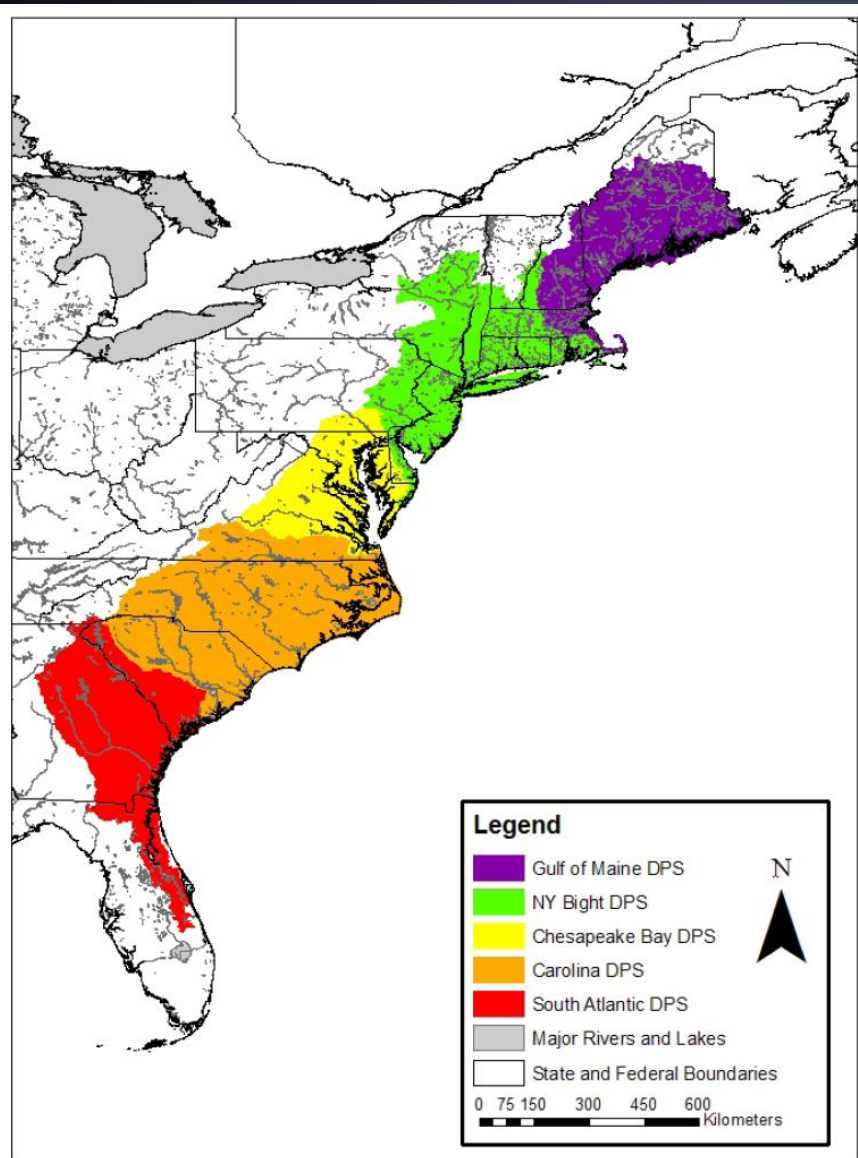
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Atlantic Sturgeon



Acipenser oxyrinchus oxyrinchus

- Anadromous
- Range: Florida to Canada
- Large – can reach 4.3 m
- Long lived – 60 years
- Late-maturing
 - Males 10-12 years
 - Females 13-20 years
- Largest US population occurs in the Hudson River



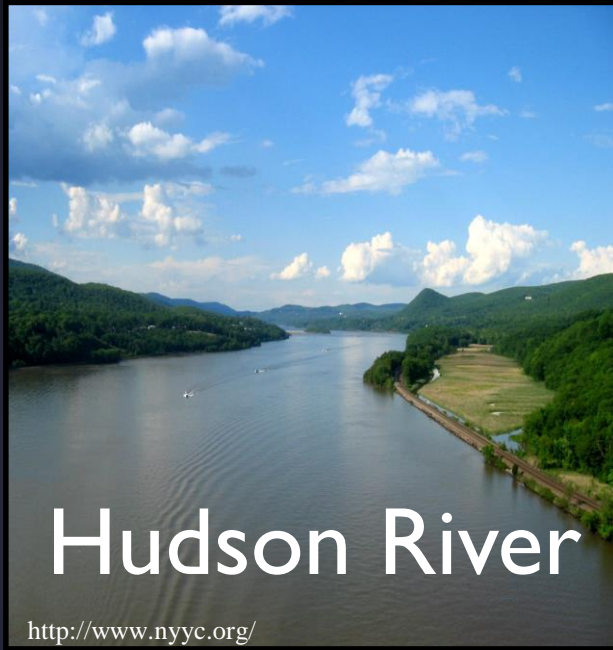
Atlantic Sturgeon



Acipenser oxyrinchus oxyrinchus

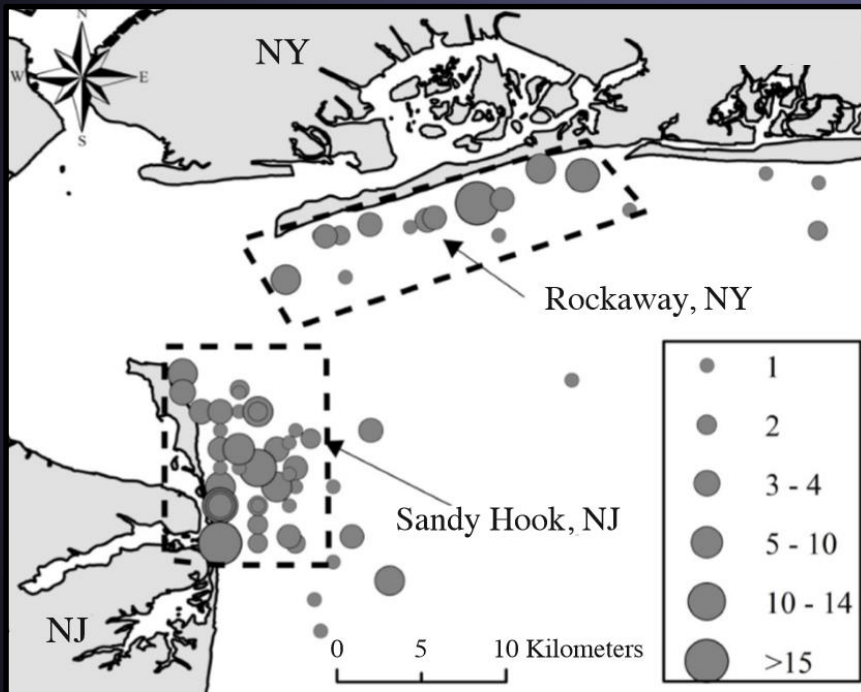
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The Importance of Connectivity

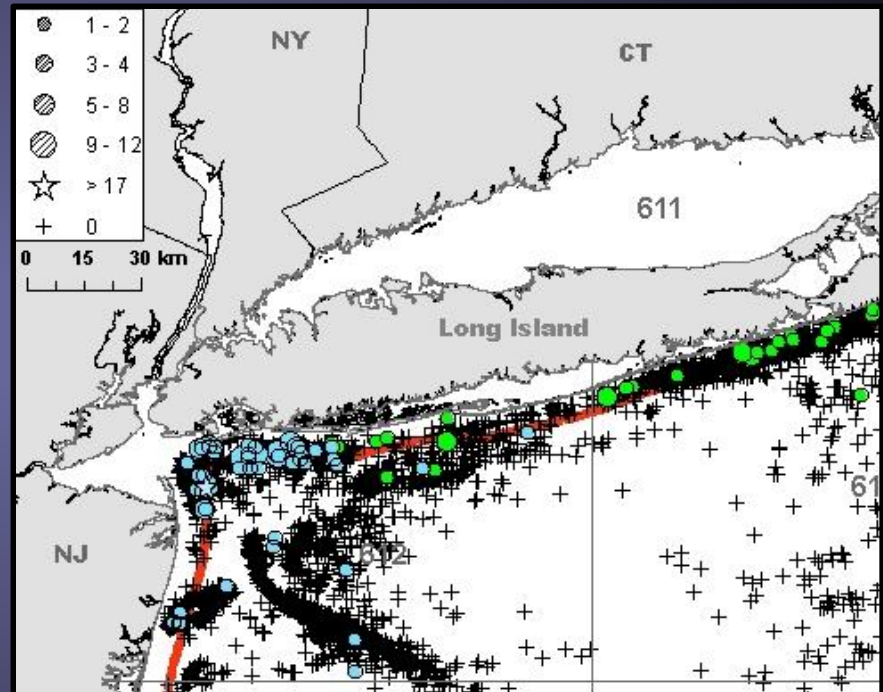


- **Research objectives:**
 - **Where** and **when** are sturgeon at risk of mortality?
 - Temporal and spatial migration patterns in the Hudson River and ocean
 - Develop conservation strategies that protect Atlantic Sturgeon while minimizing impacts to coastal communities

Aggregation Areas and Bycatch



Survey catches



Observations of bycatch –
Northeast Fisheries Observer
Program

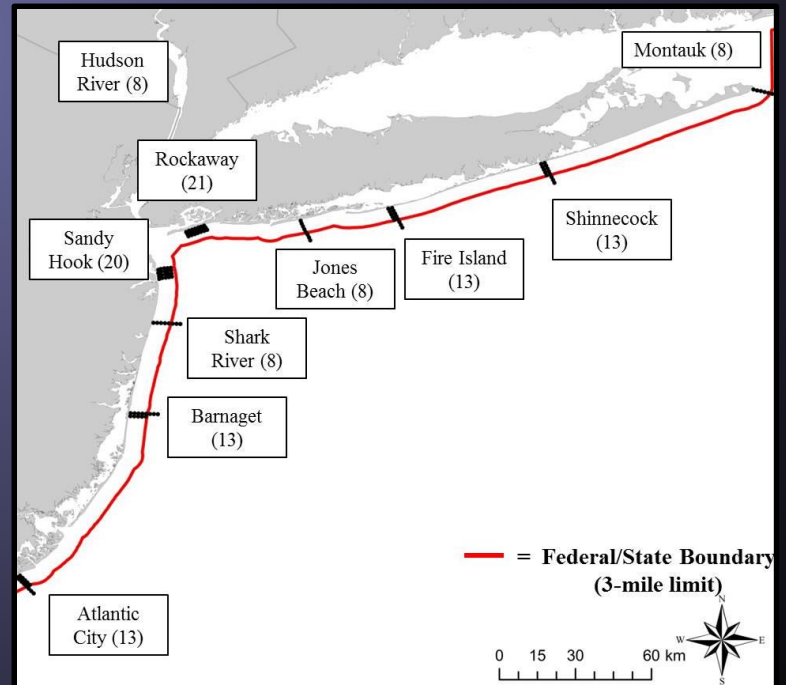
Acoustic Methods



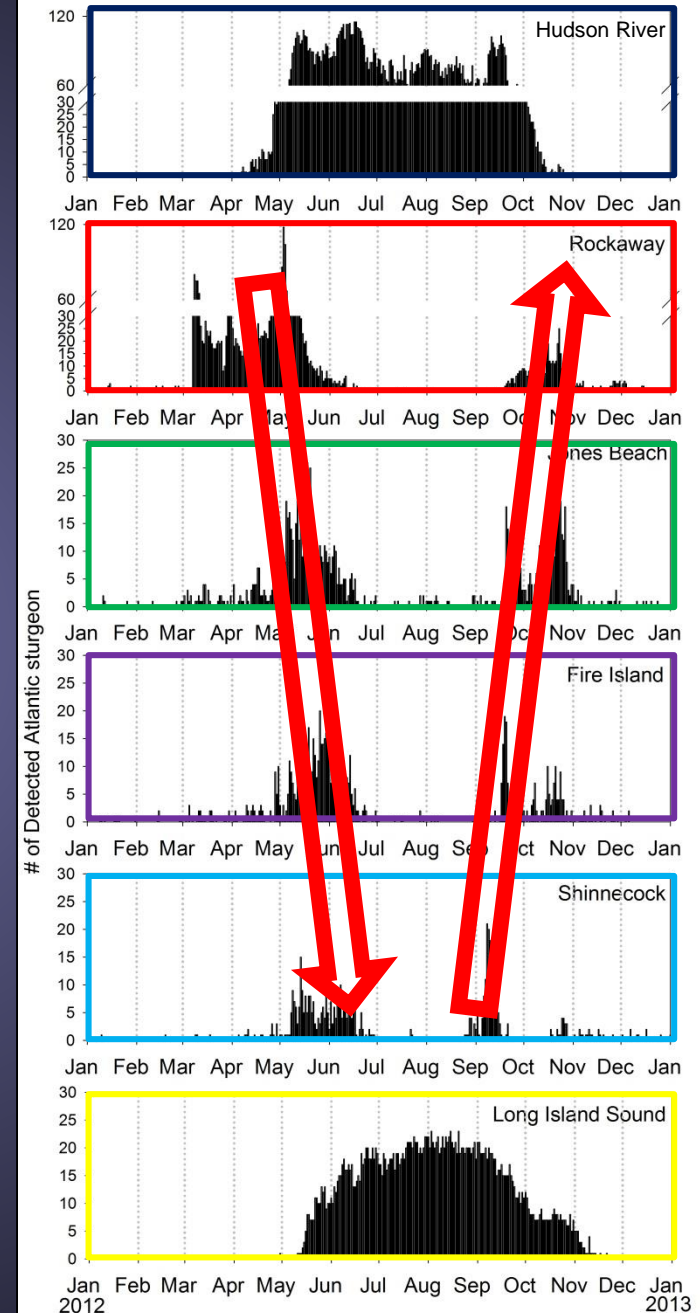
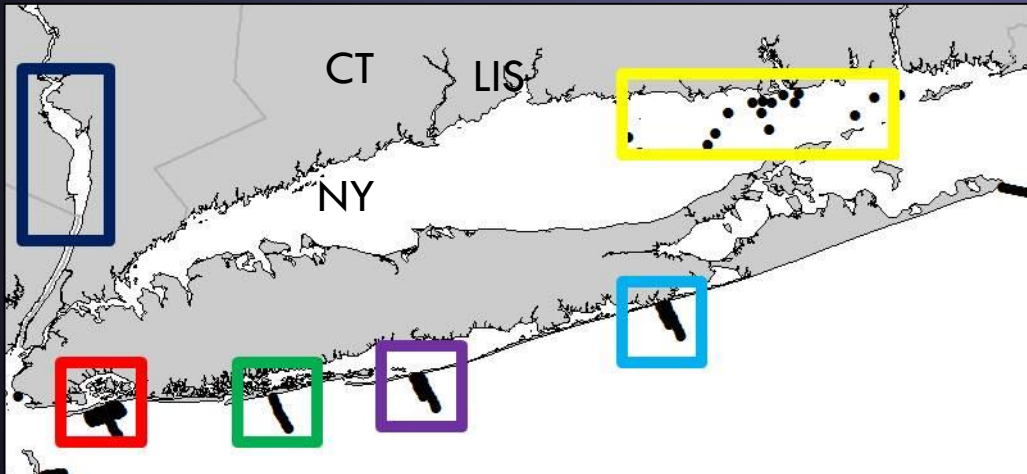
600+ Atlantic sturgeon tagged



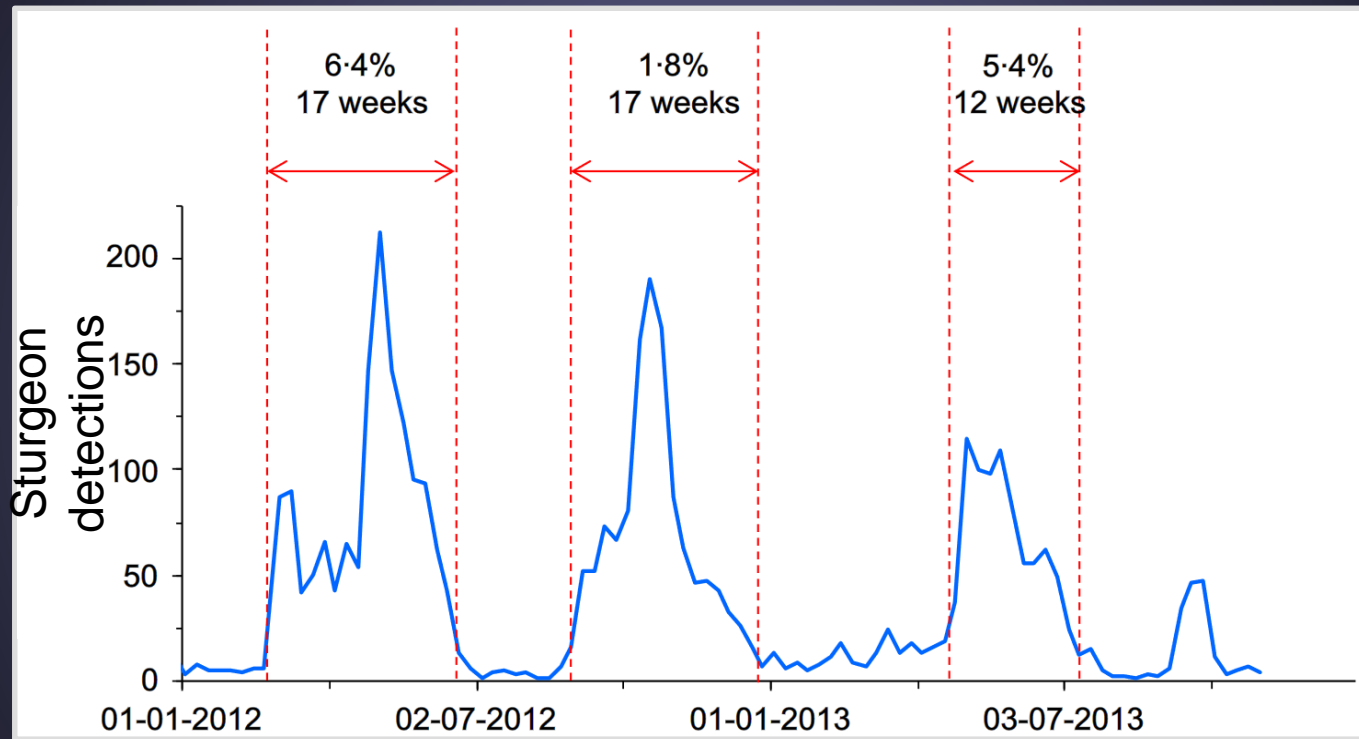
125 acoustic receivers



Migration in New York's Waters



Statistical Models Allow Identification of Where and When Mortality Occurs



- Total annual mortality averaged 12%; however, on average 6% mortality occurred along the coast of Long Island, NY (Melnychuk et al., 2017).

The Importance of Science



Conservation:

- Development of temporal/spatial management plans to reduce incidental bycatch and negative human interactions
- Determine where and when sturgeon mortality is likely to occur

Coastal communities:

- Minimize impact on fishing operations and other human activities such as wind energy, construction, dredging...

Acknowledgements



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Adrian Jordaan



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Stony Brook University

HRF



NY DEC