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Age-based habitat use of humpback whales in the New York Bight and implications for vessel strikes

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- Humpback whales recently frequently sighted in NY waters (Brown et al., 2018)
- Often foraging on fish schools (Brown et al., 2018; Barco et al., 2003)

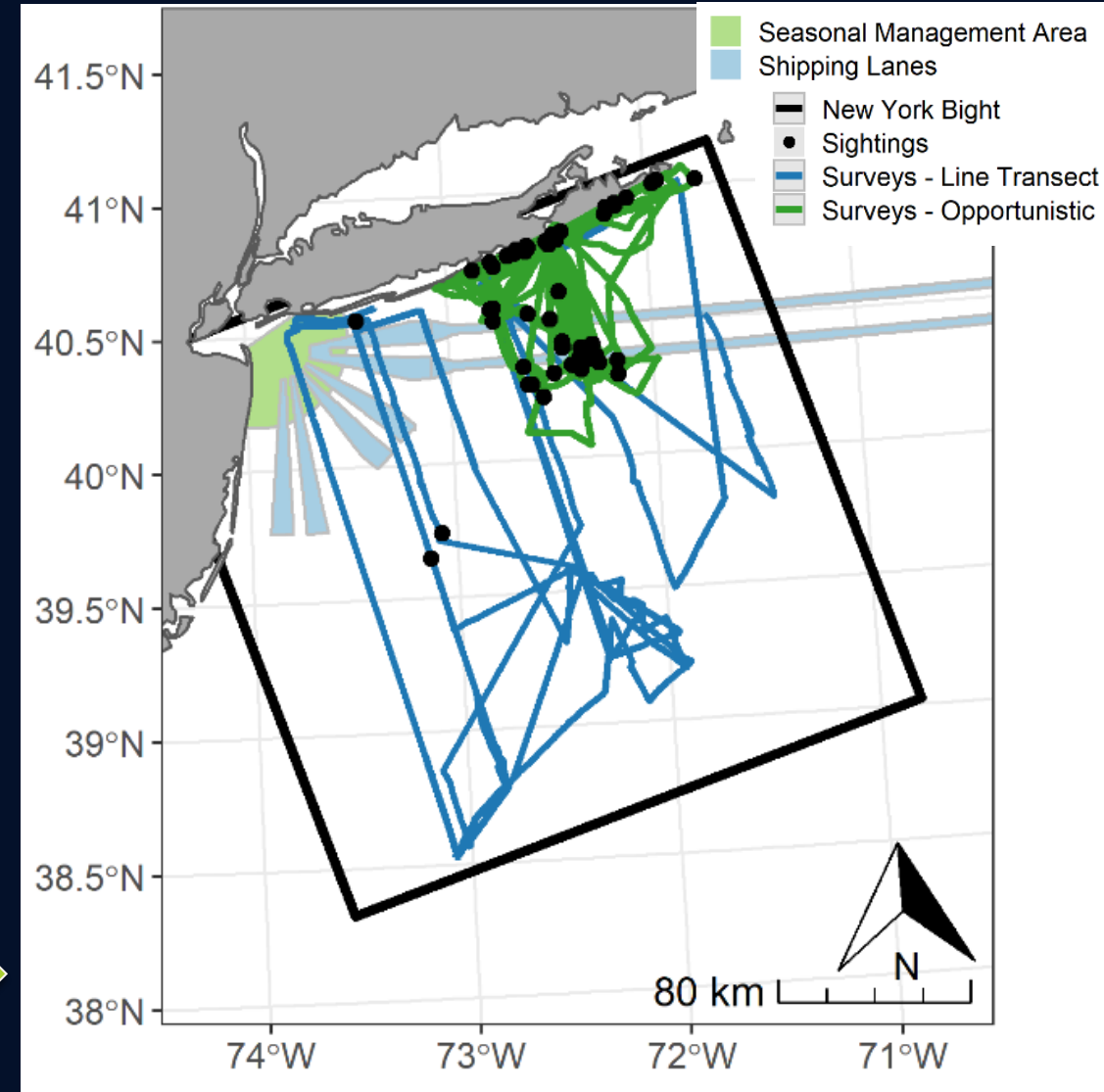


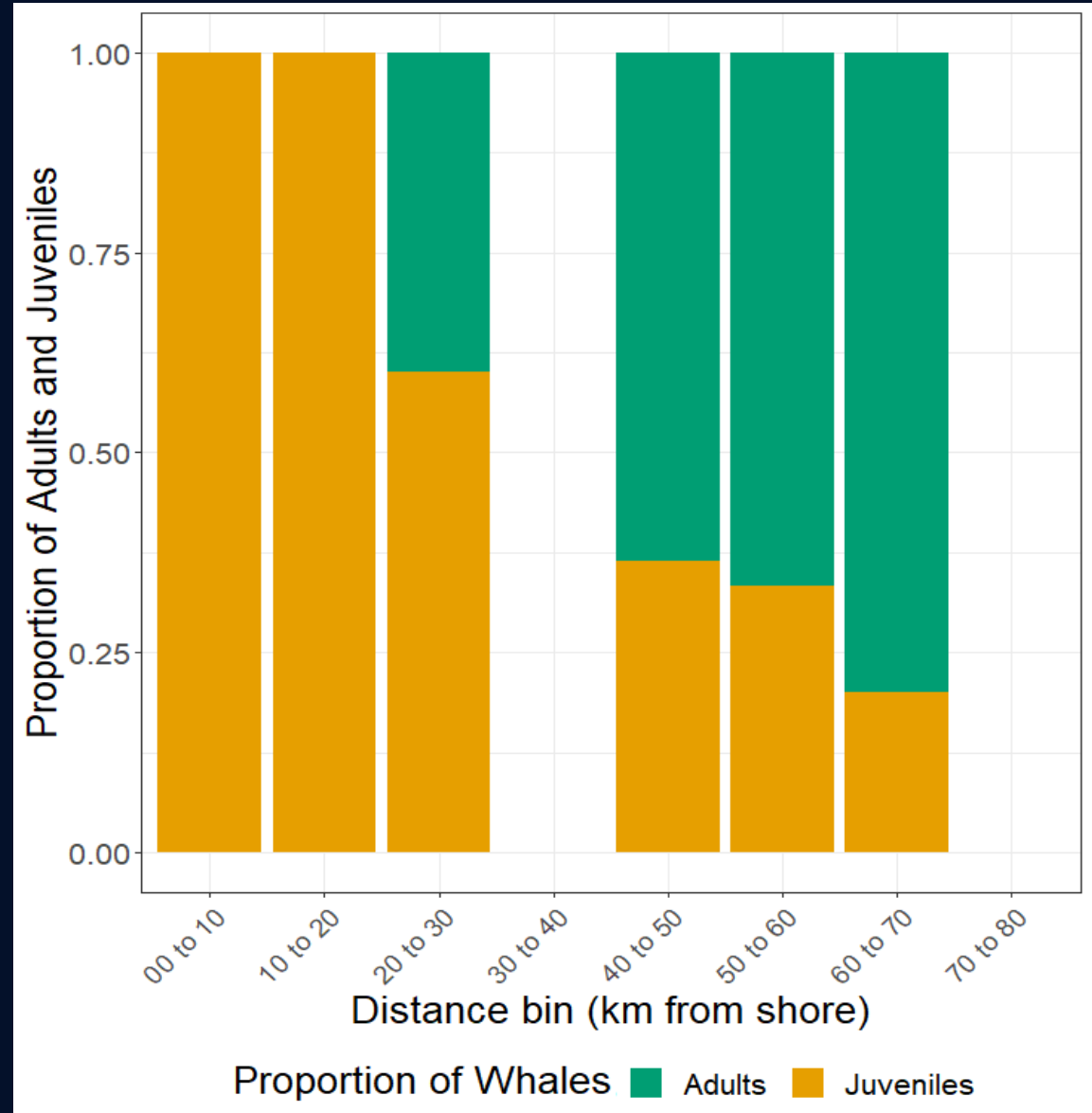
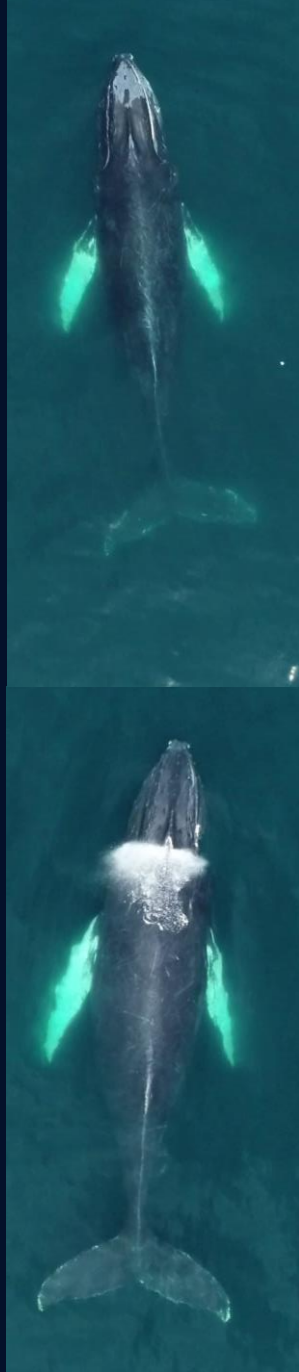
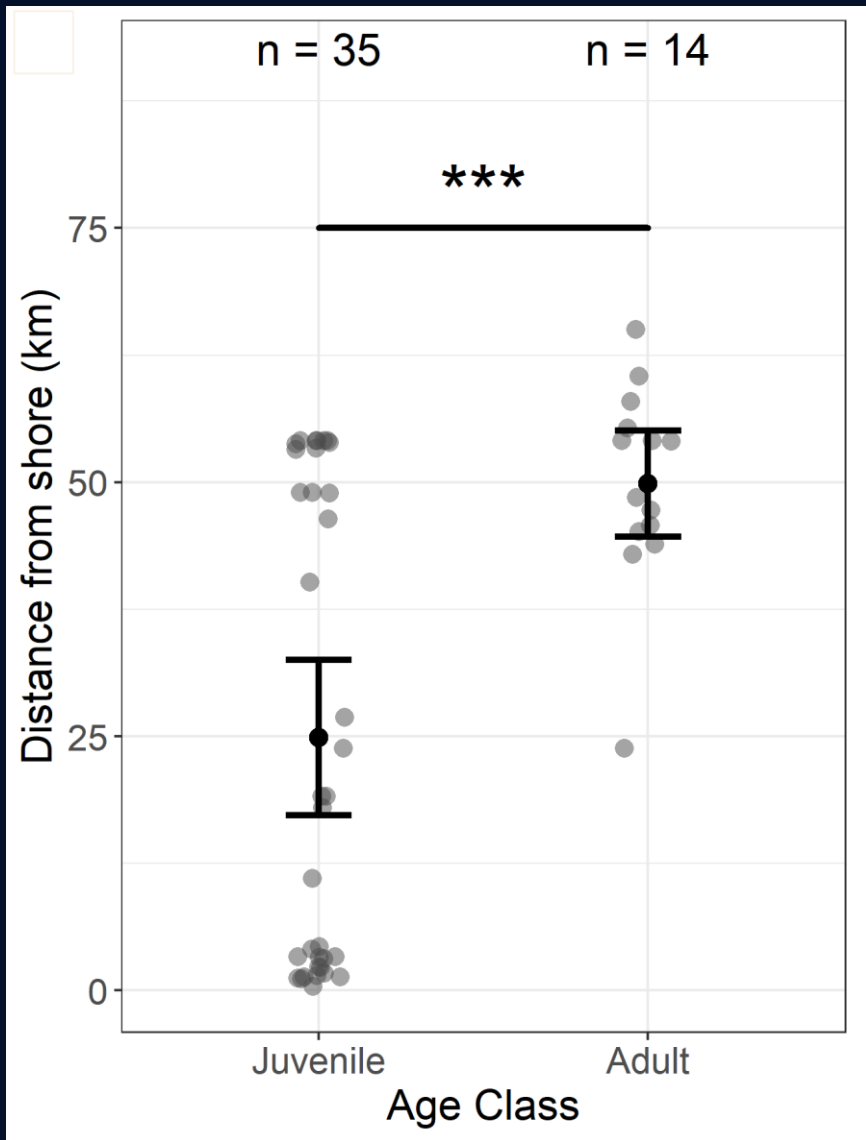
- Recent mortality increase, with high levels of vessel strikes and entanglements (Hayes et al., 2019)
- 2015-2016: >40% of ship strikes occurred in New York (Hayes et al., 2019)
- Many strandings are juveniles (Wiley et al., 1995)

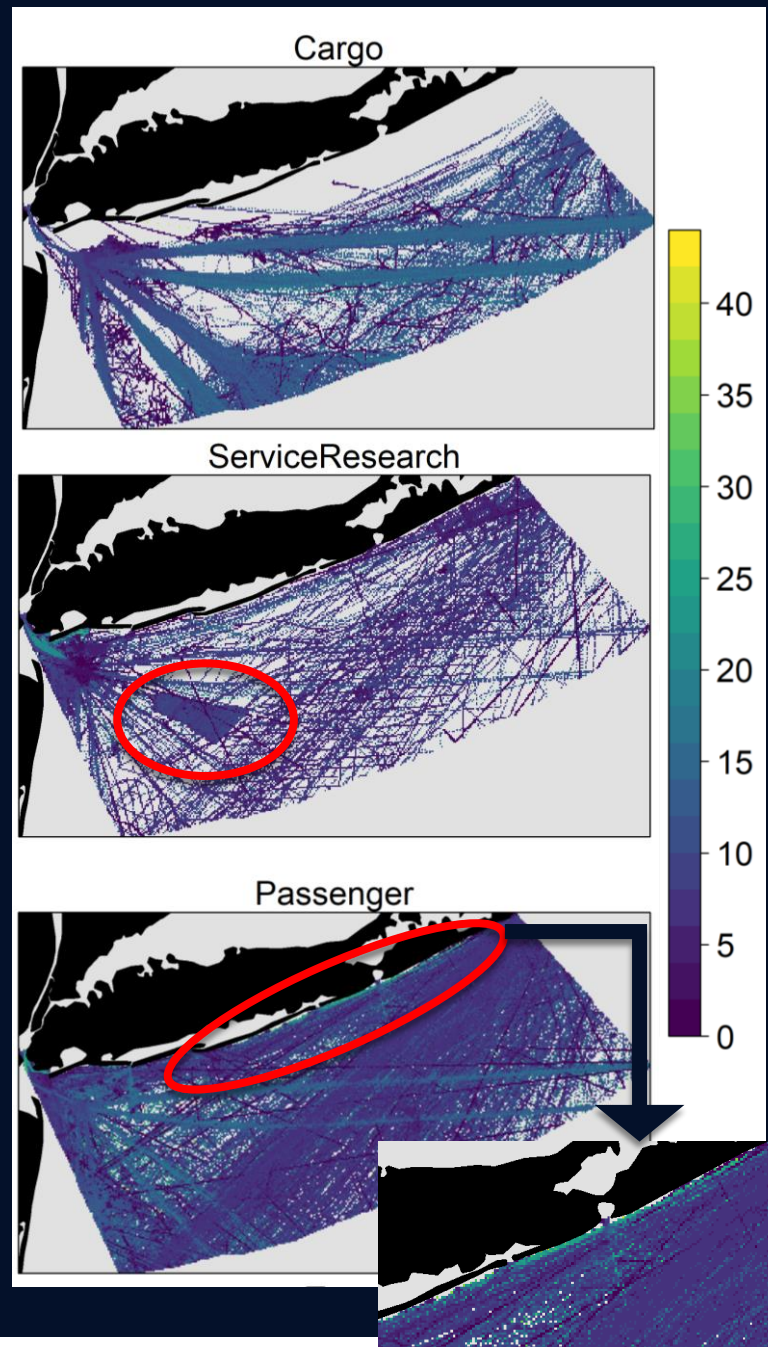
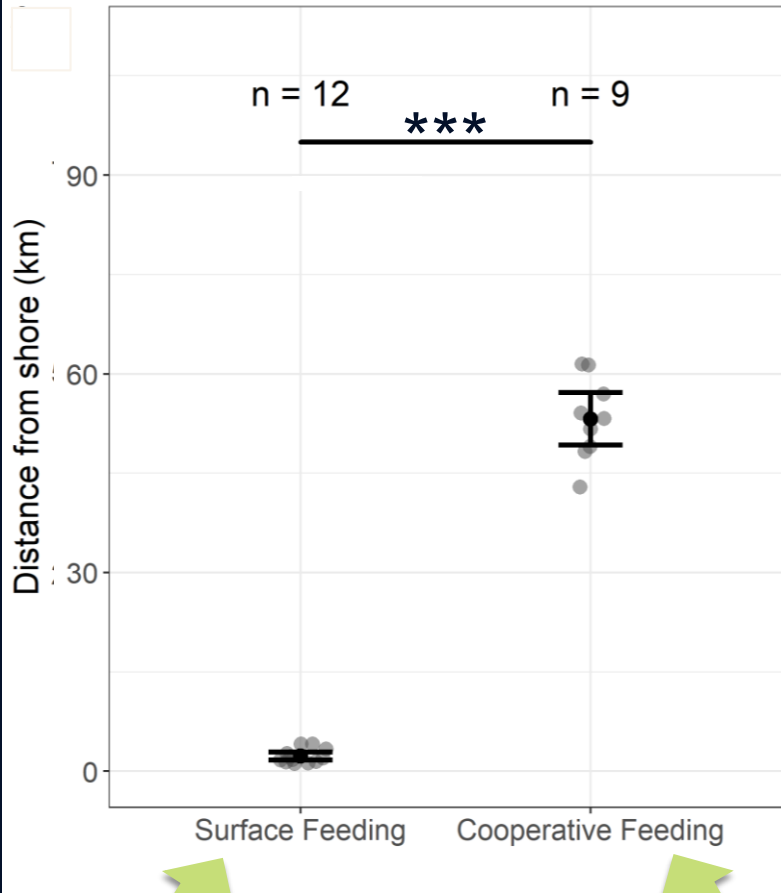


2018-2020: opportunistic and line transect surveys in New York Bight

Obtained photo-identification, behavioral data, morphometrics from drone imagery







Inshore whales are surface feeding juveniles

- Primarily at risk from small passenger vessels

Offshore whales are juveniles and adults

- Cooperative foraging
- Possible risks from offshore vessel traffic

Sub-population variability may be important for risk management in the NYB