Rice's Whale Conservation in the Gulf of Mexico

Gulf of Mexico Coastal Ocean Observing System (GCOOS) Fall Meeting
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Clay George
NOAA Fisheries Southeast Region

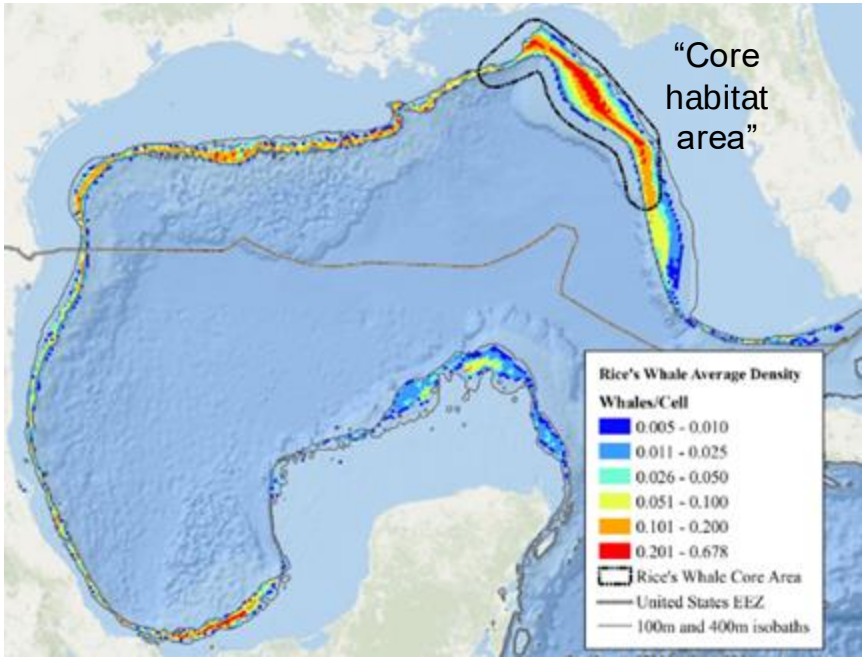
“Discovering” the Rice’s Whale

1790s	Whaling records of “finback” whales in Gulf of Mexico
1950s-80s	Strandings in Louisiana and Florida recorded as Bryde’s whales
1990s	Regular sightings in De Soto Canyon area during SEFSC surveys
2010s	DWH funding leads to first directed surveys and research efforts
2014	“GOMx Bryde’s whale” is genetically distinct from other Bryde’s whales
2021	“Rice’s whale” is a unique species endemic to the Gulf… genetically, morphologically and geographically distinct

D. Rice published first report of a GOMx Bryde’s whale from a single photo in 1965

Distribution

- Show strong affinity for continental slope & shelf break, 100-400 m depths
- Most sightings have occurred in the De Soto Canyon area
- Sightings and calls also detected off Alabama, Louisiana and Texas
- Calls recently confirmed in Mexican waters



Predicted average density (whales per 40 km^2 cell) from 2015-2019 (Garrison et al. 2024)

Status

- Listed as endangered in 2019
- Probably fewer than 100 animals remaining, probably declining
- Heavily impacted by DWH spill
- Recent surveys have found animals in poor health, few calves
- High uncertainty in pop estimates and trends because limited resources for targeted surveys in Rice's whale habitat

A Rice's whale swims through clumps of *Sargassum* (NOAA SEFSC, permit #21938)

Threats

Parts of the Gulf are highly industrialized

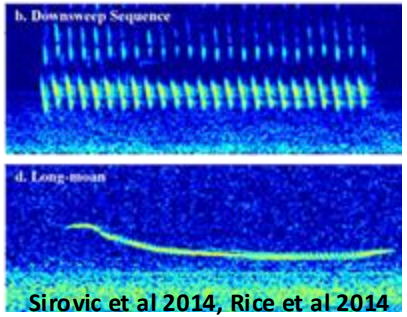
- Vessel strikes
- Noise from vessels, energy exploration and other activities
- Exposure to oil and pollutants
- Ocean debris
- Entanglement in fishing gear
- Climate change
- Emerging activities (aquaculture, renewable energy)
- Disease & health issues
- Small population size effects

Recovering Rice's Whales: Science & Monitoring

- Foraging ecology: RIWHs specialize on high energy demersal prey like *Ariomma bondi*
- Distribution: Visual surveys, passive acoustic monitoring, spatial modeling, eDNA
- Demographics and health: Photo-ID, remote biopsy, drone photogrammetry
- Threats: Stranding response, vessel strike risk modeling, ambient noise monitoring

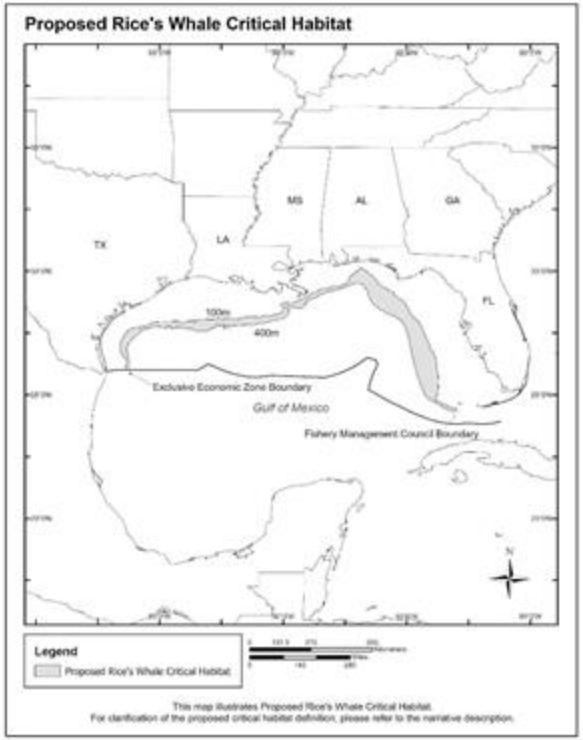
Key Unknowns:

- Pop size, trends and demographics
- Abundance in western Gulf & Mexico
- Movements throughout Gulf



Recovering Rice's Whales: Policy & Management

- ESA and MMPA give us tools to protect Rice's whales and their habitat
- Critical habitat should be finalized by Dec 2024
- Next step: Draft a Recovery Plan
- 2 DWH Restoration projects: Reducing vessel & airgun noise, Reducing vessel strike risk
- Administering the Marine Mammal Stranding Network



Recovering Rice's Whales: Education & Outreach

- Most people don't know Rice's whales exist
- General outreach to engage stakeholders and get buy-in for conservation
- Targeted research to marine resource users to reduce risk:
  - Shipping, oil & gas and other commercial vessel operators
  - Commercial fishers
  - Recreational fishers and boaters
- Report sightings to 877-WHALE-HELP

Healthy Gulf

Clearwater Marine Aquarium

Recovering Rice's Whales: Collaboration

- NOAA can't recover Rice's whales on our own
- We need to build partnerships with researchers, industry and others to leverage resources & focus the science where it matters most
- More involvement and engagement with local, Gulf-coast stakeholders…Rice's whales are your whales!
- We have the tools to recover Rice's whales if we work together

Inaugural Rice's Whale Collaborative Science Workshop, at Florida International University, November, 28-30, 2024. Forty-five conservation professionals attended from 19 organizations.

Thank You!

…to GCOOS and our Federal, State, academic, non-governmental and other conservation partners