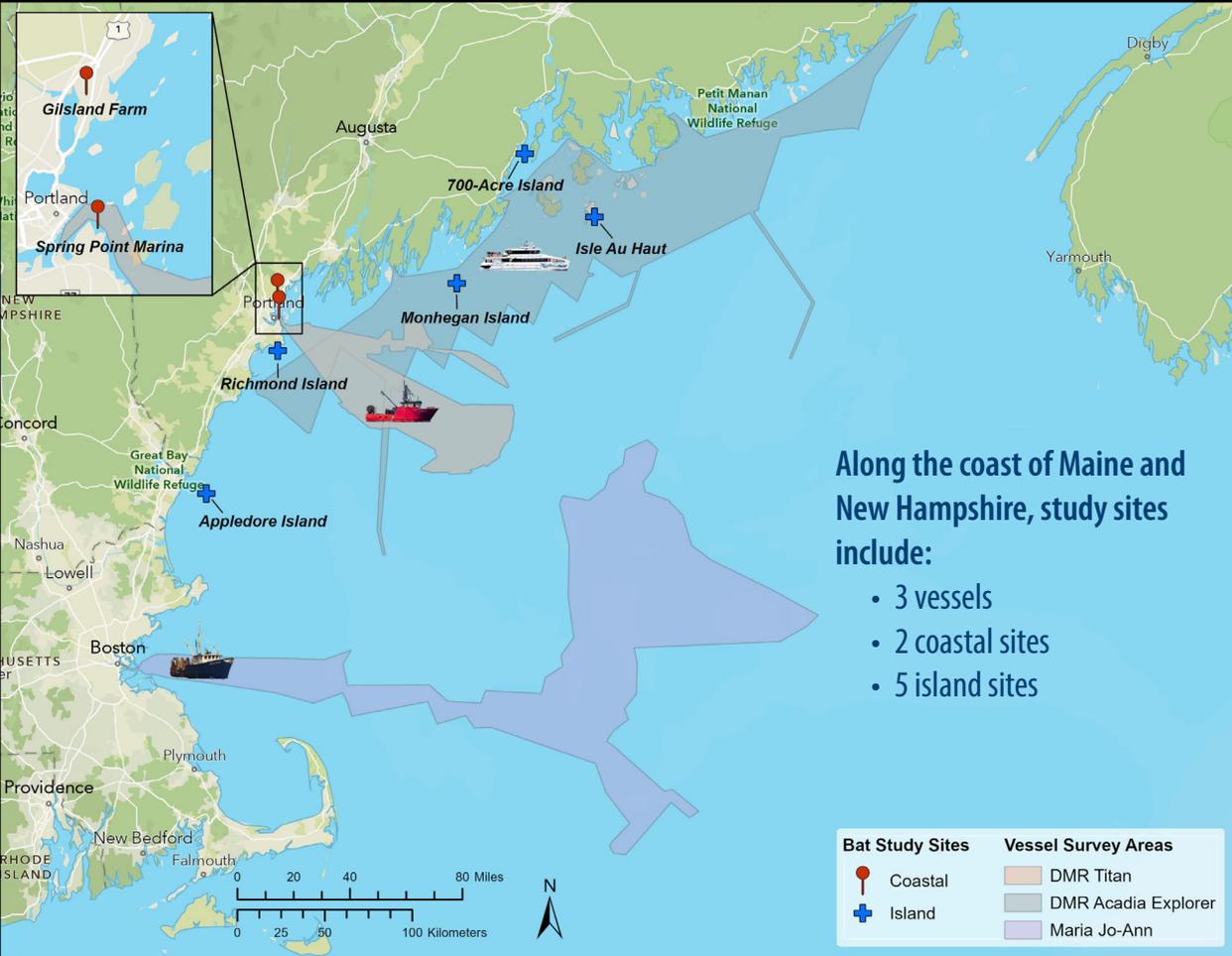


# Acoustic Monitoring for Bats in the Gulf of Maine



**Big Brown Bat**



**Eastern Red Bat**



**Hoary Bat**



**Silver-haired Bat**



**Little Brown Bat**



**Northern Long-eared Bat**



**Eastern Small-footed Bat**



**Tricolored Bat**



## Project Approach

The Gulf of Maine is home to eight bat species: Eastern Red, Hoary, Northern Long-eared, Tricolored, Big Brown, Little Brown, Eastern Small-footed, and Silver-haired bat. Researchers from Biodiversity Research Institute and the Maine Department of Inland Fisheries and Wildlife teamed up to increase the understanding of bat activity in coastal and offshore areas in the Gulf of Maine using acoustic detectors.

Between July 2024 and October 2024, biologists deployed Wildlife Acoustics SM4 bat acoustic readers enclosed in a pelican case and microphone on pole across different sites (Figure 1). The bat detector is programmed to continuously record ultrasonic frequencies.

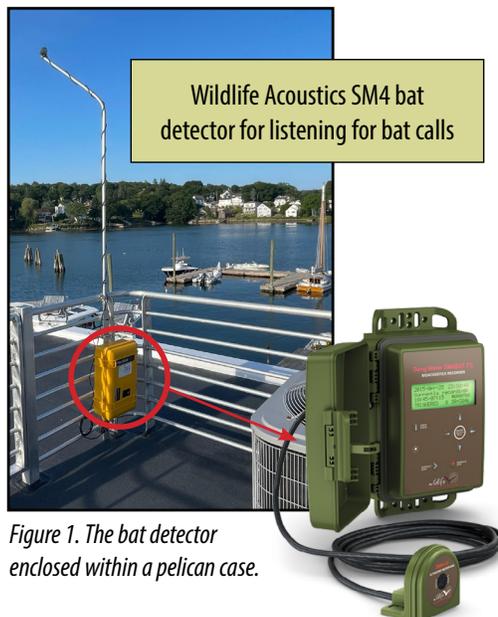


Figure 1. The bat detector enclosed within a pelican case.



# F/V Titan

## Maine DMR offshore mapping vessel based out of Portland, ME

### Summary of Findings:

- **Monitoring period: 31 July 2024 to 21 October 2024**
  - *Note: Data collection from the F/V Titan did not occur during the entire monitoring period and was limited to when the vessel was offshore*
- **Percentage of monitoring nights with bats: 26%**
- **Species detected: Big Brown, Eastern Red, and Silver-haired**
- **Furthest distance bat detected from shore: 35 miles**
  - *Data included a possible example of bat following the vessel*

### Offshore Bat Detections

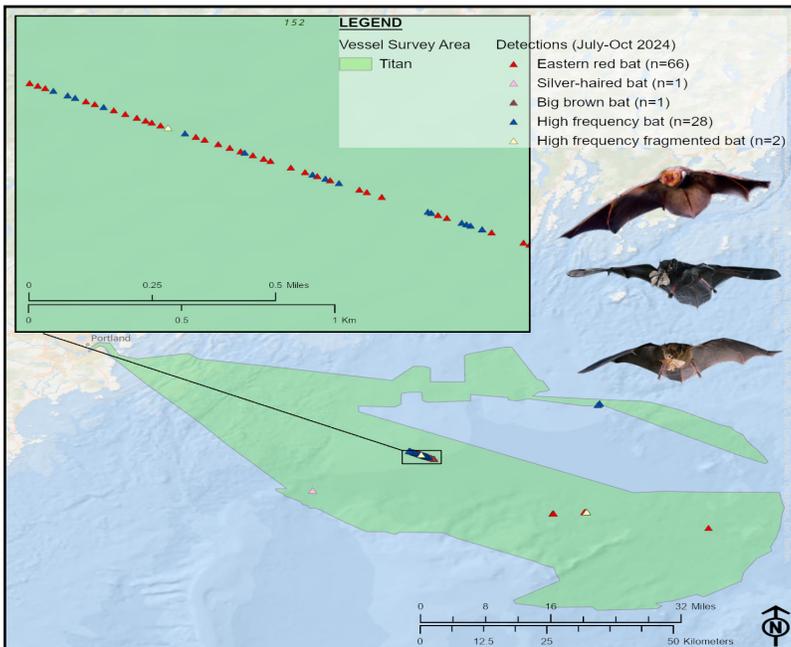


Figure 3. Map of offshore detections with zoomed in bat detections.

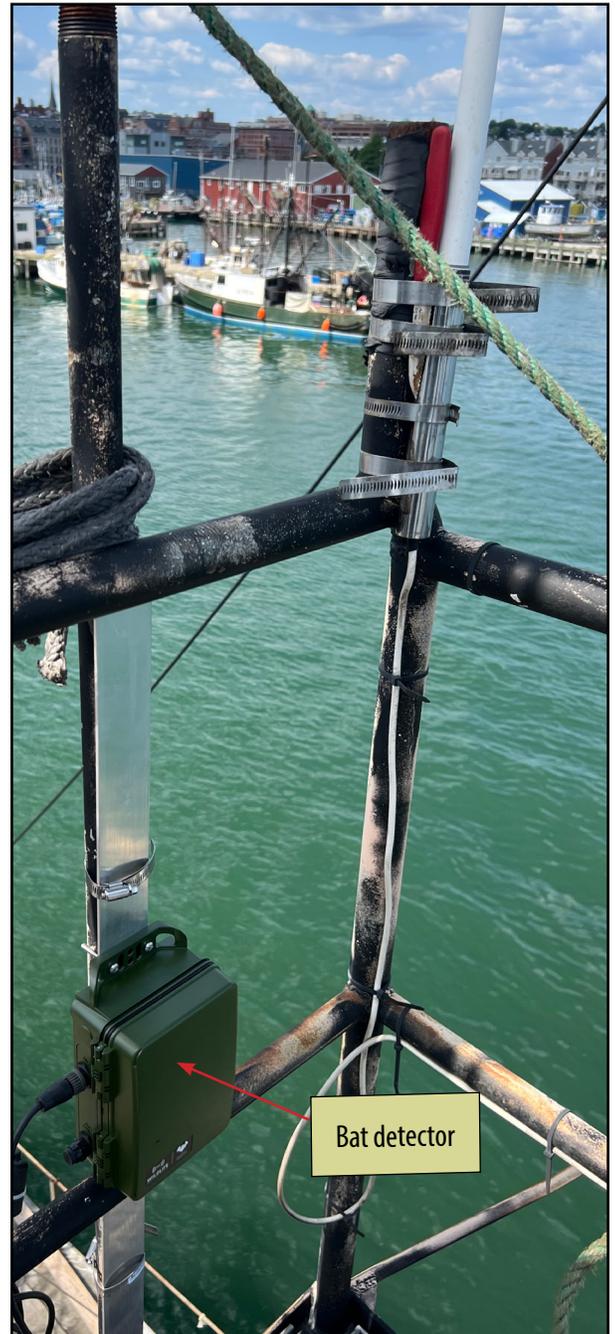


Figure 2. Photo of deployment set up.

Photo credits: Front top to bottom: Big Brown Bat; Eastern Red Bat; Hoary Bat; Silver-haired Bat; Little Brown Bat; Northern Long-eared Bat; Eastern Small-footed Bat; Tricolored Bat © Merlin Tuttle Foundation. Figure 1 © BRI staff. Back: Figure 2 and 3 © BRI staff.



Scan the QR to learn more about the project.

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