

Acoustic Sensing on Autonomous Underwater Platforms

October 14, 2026

Webinar outline

- Acoustic sensing on Autonomous Underwater Platforms – Lora
 - Vehicles for active and passive acoustic sensing
(<https://dosits.org/galleries/technology-gallery/uncrewed-systems/>)
(<https://dosits.org/galleries/technology-gallery/observing-and-monitoring-marine-animals/underwater-gliders/>)
 - Advantages of using buoyancy platforms for passive acoustic applications
(<https://dosits.org/decision-makers/webinar-series/2026-webinar-series/webinar-archive-acoustic-sensing-on-autonomous-underwater-platforms/>)
(<https://dosits.org/decision-makers/webinar-series/2021-webinar-series/webinar-passive-acoustic/>)
 - Vehicle self-noise for buoyancy platforms
 - Challenges with using AUVs for acoustic applications
 - Subsea vehicle localization
 - Future directions for AUV acoustic technology
- Passive acoustic monitoring of marine mammals – Dave
 - Example application: surveying for endangered species in Hawaii
 - False killer whale (FKW) populations and sounds
(<https://dosits.org/galleries/audio-gallery/marine-mammals/toothed-whales/false-killer-whale/>)
 - Seaglider
 - Acoustic data analysis
(<https://dosits.org/people-and-sound/investigate-marine-animals/how-is-sound-used-to-study-marine-mammal-distribution/>)
(<https://dosits.org/galleries/technology-gallery/observing-and-monitoring-marine-animals/archival-marine-acoustic-recording-units-arus/>)
 - False killer whale encounters, calls
 - Three surveys in Hawaii – FKWs, sperm whales, beaked whales
(<https://dosits.org/galleries/audio-gallery/marine-mammals/toothed-whales/false-killer-whale/>)
(<https://dosits.org/galleries/audio-gallery/marine-mammals/toothed-whales/sperm-whale/>)
(<https://dosits.org/galleries/audio-gallery/marine-mammals/toothed-whales/beaked-whales/>)
 - Real-time detection
- Passive acoustic gliders for management and conservation - Selene
 - Gliders can support protected species management

(<https://dosits.org/decision-makers/webinar-series/2025-webinar-series/ecological-risk-assessment-frameworks/>)

(<https://dosits.org/people-and-sound/investigate-marine-animals/how-is-sound-used-to-protect-marine-mammals/how-is-sound-used-to-reduce-vessel-strikes/>)

(<https://dosits.org/decision-makers/webinar-series/2020-webinar-series/nmfs/>)

- Why gliders
- Case study: North Atlantic right whales
- Real-time detection for management
- Augment ship-based surveys – example NMFS surveys
- Density estimation from passive acoustics
- Case study: fin whales
(<https://dosits.org/galleries/audio-gallery/marine-mammals/baleen-whales/fin-whale/>)
- Species distribution models
- Passive acoustic gliders for living marine resources monitoring

Other resources:

[Indeck et al. 2025, The Society for Conservation Biology](#)