

Video: Volunteers use sonar to find, remove cast-away crab pots

January 30 2025, by Lauren Alvaro



Attendees gather at Delaware Sea Grant's Crab Pot Jamboree to learn about the importance of blue crabs to Delaware's ecosystems and culture and how side-scan sonar technology helps locate derelict crab pots. Credit: Amara Davis | Sea Grant

In early August, blue crab fans took over Lewes, Delaware, for the Crab

Pot Jamboree, where the biggest catch was learning how to avoid turning your crab pot into an underwater lost-and-found.

Delaware Sea Grant hosted the jamboree at the University of Delaware's Hugh R. Sharp Campus. The event focused on celebrating the significance of blue crabs to Delaware's ecosystems and culture as well as teaching people the best practices for responsible crabbing.

At the jamboree, visitors could delve into blue crab biology and learn about the [environmental challenges](#) posed by derelict, or lost and abandoned, crab pots. Researchers demonstrated how side-scan sonar technology is used to locate these lost and abandoned pots, which can entangle [marine species](#) and damage boat propellers.

The event also featured hands-on demonstrations for visitors—many of whom are involved in the crab fishery—on how to adopt best practices to minimize the loss or damage of crab pots, repair their pots to meet the latest regulations, and ultimately prevent crab pots from becoming marine debris. The alarming number of derelict pots littering the sea floor of Delaware's Inland Bays underscores the importance of these efforts.

"We're seeing more than one crab pot per acre, which suggests we may have upwards of twenty thousand ghost pots in the Inland Bays," noted Arthur Trembanis, Ph.D., professor of oceanography and [geological sciences](#) at the University of Delaware.

According to Brittany Haywood, a coastal ecology specialist at Delaware Sea Grant, the project takes "a community-driven approach, empowering volunteers and their efforts to tackle the problem of derelict crab pots in the bays."

Throughout the year, Delaware Sea Grant hosts Crab Pot Round Ups,

where volunteers are trained to use side-scan sonar to locate and remove derelict crab pots, significantly improving the health of local waterways. Since many fishing vessels already have some form of sonar, the project is affordable and accessible for local boating enthusiasts who can use their existing equipment to find fish and help keep fish habitats clean and healthy.

Side-scan sonar, commonly used in commercial fish finders, employs sound waves to detect objects on the seafloor. This technology can identify everything from lost fishing gear to subtle changes in the underwater landscape. Once it's been determined that an abandoned pot has been found, the marine debris is removed using grappling hooks. The pots are brought back to land, cleaned, and either refurbished or repurposed in living shoreline experiments.

Jared Wierzbicki, an undergraduate summer scholar at the University of Delaware, spoke fondly of the project. Working on the project gave him "a newfound respect for sonar applications, especially within the realm of trying to locate derelict crab pots."



Jared Wierzbicki, a summer scholar at the University of Delaware, demonstrates how the side-scan sonar used in a commercial fish finder locates abandoned crab pots in the Delaware Inland Bays. Credit: Lauren Alvaro | Sea Grant

Overall, the initiative has been beneficial for the community and people have become more aware of issues related to derelict crab pots and marine debris. "When we started there were thousands of crab pots in the water that were lost and unattended," said Gary Nennstiehl, volunteer and Delaware resident. "Today, people are more aware and are taking steps to lessen the problem."

In November 2024, around 30 volunteers and partners took part in the latest Crab Pot Round Up. Over two days, they successfully removed 110 derelict crab pots from North Rehoboth Bay in Delaware's Inland Bays. Through efforts like these, Delaware Sea Grant helps protect local waterways and fosters a deeper connection between the community and the environment, ensuring cleaner, healthier bays for future generations.

Provided by NOAA Headquarters

Citation: Video: Volunteers use sonar to find, remove cast-away crab pots (2025, January 30) retrieved 30 January 2025 from <https://phys.org/news/2025-01-video-volunteers-sonar-crab-pots.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.