



USGS Conducts Fine Scale Positioning Study in Kentucky and Analyzes Results Using Fathom Position

Using Innovasea's Fathom Position software, researchers at the United States Geological Survey developed and conducted a complex fine scale positioning study to determine the effectiveness of using boats equipped with electricity and sound to herd Silver Carp in Kentucky Lake. The goal of the project is to improve future removal techniques of this invasive species.

Challenge

Fish were driven from one end of the Jonathan Creek Embayment to the other using the combined stimuli of electricity and sound. A fine-scale positioning study array of 45 Innovasea receivers was implemented to determine movement and behavior of 30 tagged fish. Typically the amount of data generated from positioning studies like this is quite large and analyzing and interpreting it is complicated and time-consuming, often requiring the services of Innovasea experts.

Solution

Dr. Matthew Acre, research fisheries biologist at the USGS, and his research team used Innovasea's new Fathom Position software to calculate fish positions from the raw data. Fathom Position enables researchers to conduct their own analysis of data generated from large scale positioning studies without the need of outside help.

Result

The ability to download KML files directly from Fathom Position gave researchers a quick look at the data spatially to determine how well positions were calculated and provided some overall first impressions on fish behavior. Preliminary results of the study itself suggest that herding fish using the combined stimuli can be effective over short distances and that it's possible to use block nets to move fish.

Dr. Acre and his team will be using Fathom Position Software for another major fine scale positioning study currently in the early stages of deployment.



Learn more at www.innovasea.com.

About Innovasea

Innovasea designs the world's most technologically advanced aquatic solutions for fish tracking and fish farming – and builds them to withstand the toughest conditions. We partner with customers to fully understand their needs and solve their most pressing challenges. It's all driven by a commitment to make our ocean and freshwater ecosystems sustainable for future generations. Today. Tomorrow. For life.