

Tiny Shrimp Help to Fine-Tune National Defense

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Research being conducted by UMaine researcher Peter Jumars of the Darling Marine Center and UMaine School of Marine Sciences has created an unlikely pairing between the U.S. Department of Defense and a tiny ocean-going creature known as the opossum shrimp.

The military's Defense University Research Instrumentation Program has supplied Jumars with a grant of more than \$103,000 to continue his groundbreaking work in the utilization of sonar technology, which seeks to establish reliable techniques for monitoring the movements of opossum shrimp as they carry out their daily migrations from the shelter of the ocean floor to the waters above and back.

So far, Jumars' research has revealed some exciting data about the biology and ecological importance of the fast-moving shrimp, which are a major source of food for small cod and other fishes. The research is proving important for national defense purposes as well, since the movements of large numbers of opossum shrimp and other small organisms can interfere with the military's use of sonar for detecting and identifying underwater mines.

"I basically study what the people who identify undersea mines call noise. Their noise has become my signal," said Jumars. "My Office of Naval Research Program Officers have been impressed by how dense the swarms of migrating shrimp can be. This is definitely not a small problem when it comes to using acoustics for local area search, and the shrimp are certainly something cod care about. I just didn't expect this

research to be connected to so many things."

Source: University of Maine

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