

SHIPWRECKS AS TIME CAPSULES FROM ANTIQUITY

# Secrets from the Seabed

Justin Leidwanger

Most people think of archaeology as something that's done with picks and shovels (and perhaps a fedora and bullwhip, if your name is Indiana Jones). But Ph.D. student Justin Leidwanger does it with multibeam sonar and magnetometers, searching for ancient history in the crystal-blue coastal waters off the island nation of Cyprus.

Until the past few decades, most of history lurking underwater was largely inaccessible, waiting for the development of scuba gear and sonar in the mid-20th century. "The dawn of underwater archaeology as practiced by traditionally trained classical archaeologists is a phenomenon of Penn," says Leidwanger, who cites former Penn professor George Bass as one of the founders of the discipline.

After Leidwanger graduated from Loyola University Chicago with a classics degree, a casual conversation with a maritime archaeologist sparked his passion for the burgeoning field. While finishing his master's degree at Texas A&M, he began surveys of Cypriot waters, a project he's continued since coming to Penn two years ago. The summer of 2006 marked the fourth straight season that Leidwanger has been working there. He and his team of researchers and divers are the first to use sonar, magnetometers and remotely operated vehicles around the island, exploring Episkopi Bay and other areas on the southern coast for wrecks and artifacts.

Because land travel was difficult and slow in the ancient world, almost everything of value moved by water. For maritime archaeologists, every unlucky ship that fell victim to the eastern Mediterranean now provides a lucky snapshot of a long-lost age. "People refer to it as a time capsule, which to me is just absolutely fascinating," Leidwanger notes, "because I can know that every single thing on that ship was in use at the exact same time. It's sort of like a Pompeii in that sense." Cargo was usually stored in amphoras, ceramic vases of varying sizes that were the packing crates of the ancient world. The design and decoration of amphoras provide vital clues to a ship's origins.

Although, as Leidwanger remarks, a lot of people can't find Cyprus on a map, the island "played an absolutely crucial role for a millennium. Even after the Romans occupied it, it was quiet, it was peaceful. People weren't necessarily writing about it, but man, was it busy. The economy was absolutely booming in late antiquity, in a time when we usually think of things as starting to fall apart."

Leidwanger, a lanky, neatly bearded 28-year-old, never expected to end up working underwater. "I've never really seen myself as a water person. I was never much of a swimmer," he admits. "Nor did I know how to dive or what it entailed. It wasn't until college, really, that I thought I would end up in the water for a career." His long-range goals include working to preserve the yet undiscovered "cultural heritage of the world that is submerged."

Meanwhile, he'll continue to scour the Cypriot seabed for clues to the past. "It's a small enough place that we can do a lot of work and cover a lot of area, but it's still going to take a lot of years," he says. Water person or not, he clearly relishes the challenge. ■

—MARK WOLVERTON

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