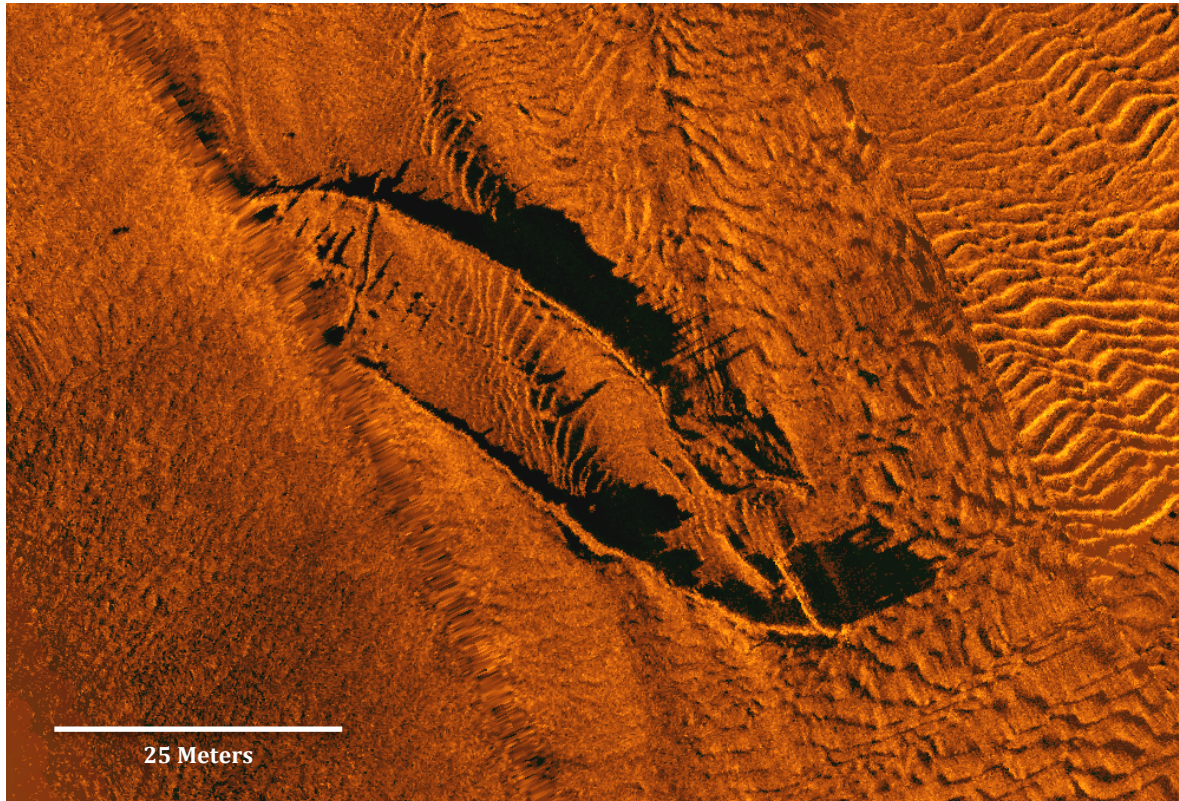


# Solving the Mystery Wreck

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In 2010, graduate students from the University of Delaware's Coastal Sediment Hydrodynamics and Engineering Lab imaged a wreck off Delaware's Cape Henlopen. The side-scan sonar showed a large wreck, but the detail of the image was lacking definition. Hoping to identify the wreck, Dr. Art Trembanis returned to the site in 2012 with new graduate students to reimage the wreck with a towed side-scan sonar array. As a student of archaeology and oceanography, I was given the task to process the data and glean what information I could from the side-scan. I used SonarWiz, having recently learned the software, to process the data. With the finished product (above), we were able to view the wreck in great detail and observe its age. We could see the individual deck stanchions inside the hull and detail the damage to the port bow section. More importantly, we were able to calculate the size of the wreck and how proud the wreck sits off the seafloor, and were able to export the image and view it in geographic space. All of these details were fundamental to solving the identity of the wreck. I was able to match the data with historical records, and soon found that our mystery wreck was the wreck of the W. R. Grace, an American down-easter stranded on the cape in an 1889 hurricane.