

Deakin University reveals World War II shipwreck with VideoRay ROV

2009-05-01 13:00:00 by Rons_ROV_Links



The MV *City of Rayville*, the first US vessel sunk during World War II, has been revealed in detail for the first time by Deakin University scientists. Thanks to the state-of-the-art sonar imagery and remotely operated vehicles, the scientists have been able to take the first detailed images of the ship in its watery grave. The vessel was sunk in 1940 by a German mine off the coast of Cape Otway in Victoria, Australia, in more than 70 metres of water.

While its approximate location has been known since 2002, the depth of its final resting place has meant obtaining information about the wreck site has been difficult.

Recent advances in technology have allowed the scientists to investigate the site remotely. Using sonar equipment, the team was able to develop detailed 3D models of the *City of Rayville* wreck site and collect video using a VideoRay remotely operated vehicle (ROV).

"It was very exciting to see the *City of Rayville* for the first time," said Dr Daniel Ierodionou, Deakin researcher and the principal scientist overseeing the project.

"Beautiful marine life has colonised the exterior of the wreck with dense invertebrates including sponges and sea whips visible. The hull also provides an artificial reef, attracting and providing habitat for a vast array of marine life such as fishes," he said.

"The multi-beam sonar images provide a very clear picture of the orientation of the wreck and surrounding seabed. The wreck is laying upright on its keel, with a slight list to one side," said Cassandra Philippou, Heritage Victoria Maritime Archaeologist. "A hatch cover near the stern is missing, consistent with reports that covers were blown off the hatches through the force of the explosion. Sediments have built up to the south-west of the wreck, and there is a deep scour on the northern side," she said.

The *City of Rayville* was uncovered as part of a wider project to map Victoria's seafloor environment. The project team was provided with proximal coordinates for the wreck by Heritage Victoria's Maritime Heritage Unit. "The data captured will help us assess the structural integrity of the wreck and provide vital information for the management of this deepwater site," said Cassandra Philippou. Closer examination of the video by maritime archaeologists at Heritage Victoria will enable additional features of the site to be identified.

The wider coastal mapping project will provide vital information on marine life on Victoria's seafloor. The findings are captivating and will redefine the way that Victorians see their marine environment, according to Dr Ierodionou. "For the first time we have an accurate and comprehensive picture of life and the diversity of marine habitats, including hotspots for marine plants and animal communities," he said.

A joint initiative of Deakin University, Fugro Survey P/L, the Australian Maritime College and the

Victorian Partnership for Advanced Computing, the work forms part of an ambitious undertaking to eventually map all of Victoria's marine environment.

"The significance of this work is immense," Dr Ierodionou said. "For some areas, this is the first information that has been obtained since Matthews Flinders took depth readings from his ship, the Investigator, in 1803."

Note: The *City of Rayville* is listed on the Victorian Heritage Register and the National Historic Shipwrecks Database. Under the Historic Shipwrecks Act 1976 it is an offence to disturb, damage or remove items from historic shipwrecks, with penalties of up to \$50,000 for a body corporate and \$10,000 and/or imprisonment for up to five years for an individual.

About the City of Rayville

On 8 November, 1940, the *City of Rayville* was en route from Port Pirie in South Australia to Melbourne when at 7:47pm, it struck a mine laid by the tanker *Storstad* (operating under its new name *Passat* after being captured by the German raider *Pinguin*). The explosion was powerful enough to rip out the foremast, as shrapnel (including ingots of lead, part of the 1500 ton cargo aboard the vessel) rained down on the *Rayville*'s superstructure. The *City of Rayville* was the second victim of the newly-laid German minefield in Bass Strait. The British steamer SS *Cambridge* was lost just 24 hours earlier after hitting a mine off Wilsons Promontory. Both ships were destroyed by the Germans who had laid 100 mines in Bass Strait from the *Passat*. This preceded the attack on Pearl Harbor, in December 1941, by more than a year, and resulted in the death of the first US seaman in World War II.

<http://www.rovworld.com/modules.php?name=News&file=article&sid=3180>