Current condition of the Dardanelles Campaign shipwrecks from a diver's point of view and technical diving requirements

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Abstract

Dive surveys were carried out to the Irresistible, AE2 submarine, HMS Majestic, Lundy, SS Milo, Louis, Arıburnu Barge, Arıburnu Lighter, Helles Barges and the Unknown shipwreck, all belonging to the Allied Powers, which sank around the Gallipoli Peninsula during the Dardanelles Campaign of the Word War I. Providing a preliminary information and recommendations for divers of any purpose were aimed, together with the comparison of the original and current conditions of ships, diving plans in consideration with sea and weather conditions and what to see from a perspective of marine biodiversity.

Keywords: Dardanelles, Gallipoli, shipwreck, scuba diving, technical diving

Introduction

Dardanelles Campaign also known as the Gallipoli Campaign was one of the most violent battles of World War I, both at sea and on land, Turks and the Allies suffered many losses. The most advanced battleships of those years encountered an unexpected resistance. Some were sunk by land artillery, some by mines, and some by allied German submarines.

Çanakkale as being one of the important historical and cultural tourism attraction sites in Türkiye, has a great diving tourism potential through the sunken ship wrecks during and after the World War 1 (Türkel and Gökdemir 2021). Diving to see these wrecks that have been lying on the seabed for more than a century, helps to sense how brutal the Battle of Gallipoli was. Giant battleships that took lives in the past have now become life-giving and protective habitats for nature.

The shipwrecks were like hidden treasures known only by historians, academicians and a few enthusiasts. In order to reveal these treasures to meet people from all around the world, "Gallipoli Historical Underwater Park

Project" was initiated by the Directorate of Gallipoli Historical Site in 2017. The project aimed to identify and conserve the shipwrecks while presenting them to visitors in accordance with protection measures. In the first place, among many more, the most accessible 12 shipwrecks and 2 natural reefs have been chosen to be protected and opened to visitors under the administration of the Directorate of Gallipoli Historical Site.

Here in this study, we aimed to present 10 shipwrecks with the stories starting from their last days to present, the safe ways to reach them by means of scuba diving and the beauties to be seen on and around them. Since 3 of these wrecks lie at the depths out of the limits of recreational diving, technical diving requirements, the safest routes and dive profiles were offered.

Materials and Methods

The study has two different methods; one is included in the procedures of sportive scuba diving, the other is the technical diving applied out of the limits of sportive diving. Recreational scuba diving surveys were conducted for HMS Majestic, Lundy, SS Milo, Louis, Arıburnu Barge, Arıburnu Lighter and Helles Barges by both authors and three other colleagues, during the summer season of 2023, while technical dives were conducted for Irresistible, AE2 and the Unknown wreck, by only the first author, in different years. For recreational dives, a commercial diving boat was hired with the support of the Directorate of Gallipoli Historical Site. Technical dives were organized by the first author's personal efforts. All dives were recorded with an underwater video camera system, GoPro hero10 and 30000 lumen light system mounted on the handle. Images were captured from the videos.

The ships are listed in the order of their dates of sinking; starting from the oldest, except for the last 4, which 3 of them are barges and 1 is the so called unknown wreck.

IRRESISTIBLE

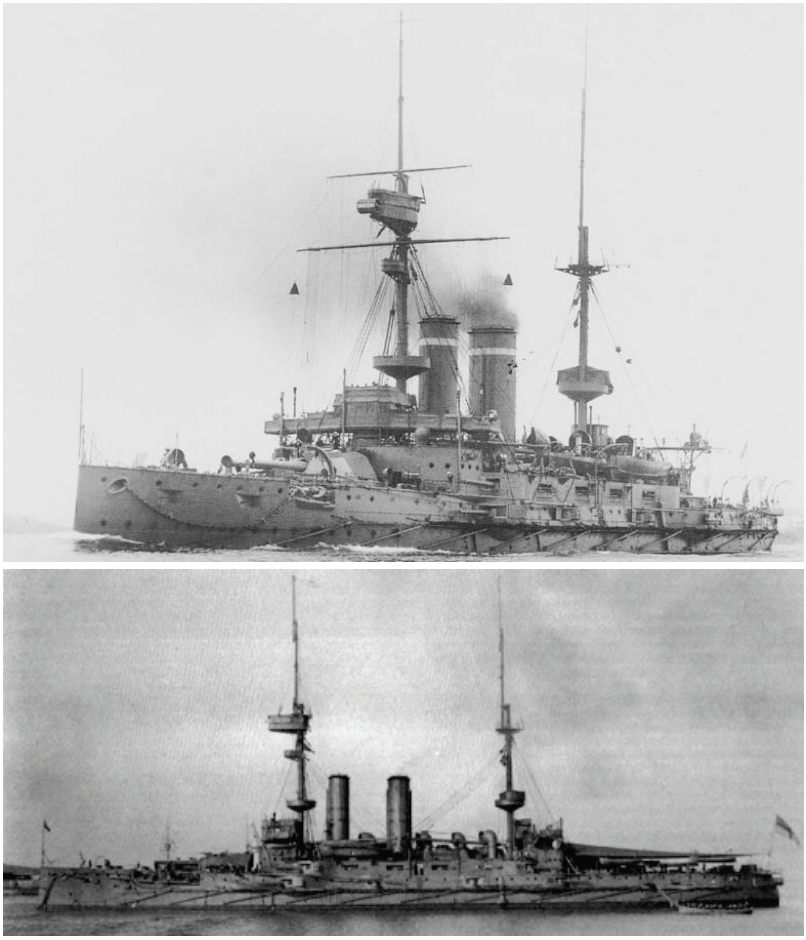

Figure 1. Formidable class pre-dreadnought battleship Irresistible (Liman 2023)

Irresistible was assigned to bombard the forts and batteries along the Dardanelles Strait. On the 1st of February 1915, she arrived at the Aegean Sea entrance of the strait and served as the flagship of the British Royal Navy until March 1915.

She was similar in appearance to its predecessor, the Majestic and Canopus classes (Figure 1), with 125.30 m length, 22.86 m beam, 7.92 m draught and 15.805 tons displacement.

Armament: 40 caliber 12 inches (300 mm), 40 caliber 6 inches (150 mm).

Complement: 711 (peacetime), 780 (wartime)

Irresistible, together with the other ships of Allied Naval Fleet, attempted to cross the Dardanelles many times but could not pass the narrowest part of the strait, Kilitbahir. After the attacks, ships were manoeuvering in the wide areas of the strait, Erenköy (İntepe) Bay and Dardanos fronts, to return back. At first, Irresistible was hit by Anadolu Hamidiye battery then the explosion of a mine that had been laid by the minelayer Nusrat, caused her to incline on starboard. She was also hit on the conning tower by a howitzer shell and another mine blew up under her starboard engine room. There were 200 casualties. After nearly a two hours long struggle on the surface, she was abandoned, the remaining crew were rescued by Destroyer Wear and another British battleship, Ocean. On 18th March 1915, at about 19:30 she sunk. She is now buried upside down at 63 m deep (Kolay *et al.* 2015).

Top point of the wreck is at 49 m, the deepest part is at 63 m depths (40º04.438 N, 26º20.441 E). The cannons on the side boards can be recognized (Figure 3). There are two large cracks at the stern and at the bow (Figure 4). These cracks were opened as a result of the use of dynamite within the scope of "Removing and Selling the Wrecks of Ships Sunk in Çanakkale". Precious metals, together with shafts and propellers were all taken.

In order to dive to Irresistible, within the scope of technical diving procedures, divers need to have technical diving certificates (e.g. Trimix) and dives should be carried out under the leadership of a diver guide (Figure 2).

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Dive plan report
-----------------------------------------
Bühlmann zh-116 A, GF 30/85
Max depth: 63 m OC Dive
Altitude: 0 meters - Salinity: 35 ppt
Water density: 1025.97
63m, 15min, TX 17/45 OC Tank#1, Gas weight:  4.4 Kg. (24 l./230b/5520 l.)

Deco gases list:
----------------
EAN 50, @22 meters, Tank#2, Gas weight:  2.2 Kg. (7 l./230b/1610 l.)

Projected decompression:
-----------------------------------------
DEPTH     GAS TYPE PRESSURE  TIME  RUN
-----------------------------------------
  63m  TX 17/45    151 Bars  11'   15'
  27m  TX 17/45    148 Bars   1'   20'
  24m  TX 17/45    145 Bars   1'   21'
  21m  EAN50       221 Bars   1'   22'
  18m  EAN50       213 Bars   1'   23'
  15m  EAN50       206 Bars   1'   24'
  12m  EAN50       193 Bars   2'   26'
   9m  EAN50       177 Bars   3'   29'
   6m  EAN50       154 Bars   5'   34'
   3m  EAN50       109 Bars  12'   46'
   0m  EAN50       109 Bars       47'

Start CNS:    0,0%  - OTU's:    0,0
Final CNS:   14,7%  - OTU's:   38,7

GAS CONSUMPTION LIST:
-------------------------------------------------------
 No GAS TYPE              CONS     ∆ WEIGHT      RESID.
-------------------------------------------------------
  1 TX 17/45 OC          2036 l. (- 1.6 Kg.)       145
  2 EAN50 OC              849 l. (- 1.1 Kg.)       109

   TOTAL USED GAS WEIGHT:         (- 2.8 Kg.)

First leading compartment: C03@27
Last leading compartment : C08@3

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Figure 2. A dive profile sample for Irresistible

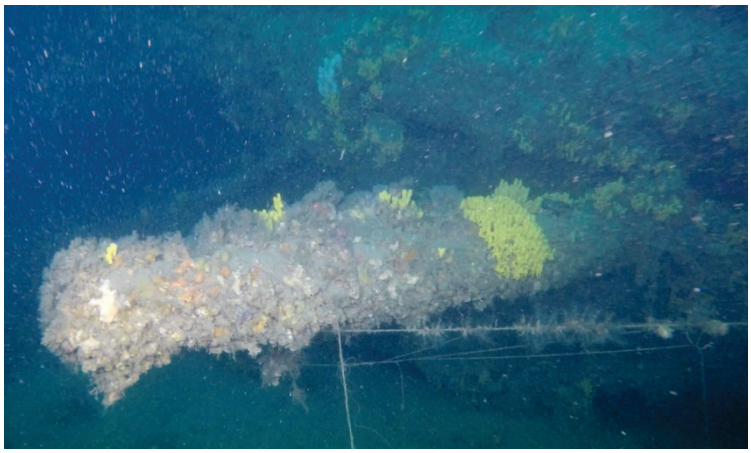

Figure 3. A cannon on the side board of Irresistible

Figure 4. One of the cracks opened by the dynamites used to dismantle the wrecks

During southwest winds, visibility may be poor due to the shifts in direction of surface and bottom currents.

AE2 SUBMARINE

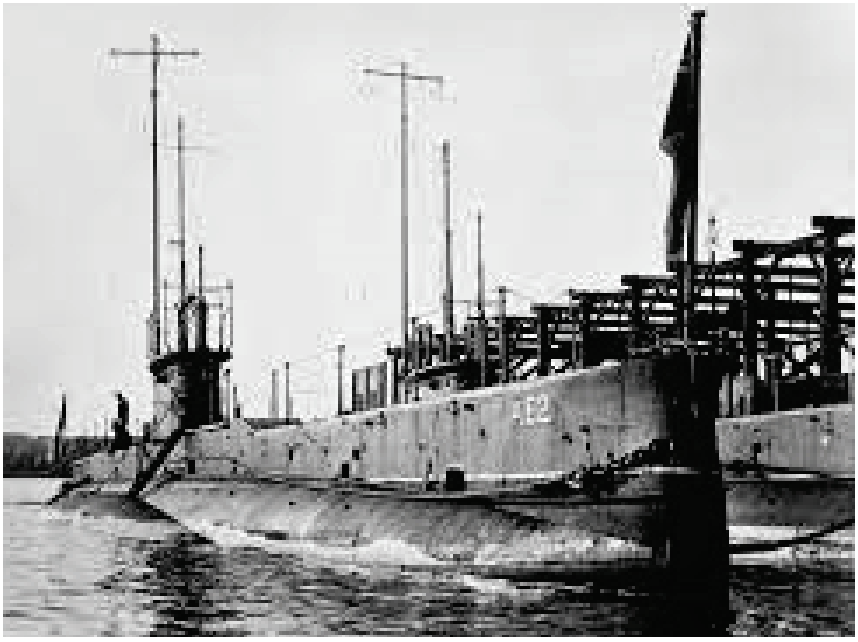

Figure 5. AE class (E class, Group 1) submarine HMAS AE2 (AWM 2023)

AE2, the first submarine in history to pass the Dardanelles Strait and reach the Sea of Marmara was a British made, E-class submarine ordered by Australia for a better coastal safety. She was the most high-tech, largest, and fastest of her time. However, her mission to head to İstanbul and block the transportation of supplies to the Gallipoli fronts ended up on 30 April 1915, when hit near the engine room, by the Turkish torpedo boat, Sultanhisar. Her commander, Lieutenant Henry Hugh Gordon Dacre Stoker made a decision to surrender, while sending his ship to the depths of Marmara Sea by opening the ballast valves in order to avoid the Turks to capture her.

AE2 is now resting at 72 m depth off Karaburun (40°32.696 N, 27°16.173 E). Its wreck stands tall on the silty/muddy sediments that easily causes turbidity and makes it even harder to get a clear vision at that depth. When reached to the wreck, first thing realized is the open hatch of the sail (Figure 7).

The fauna over the wreck (Figure 7) is quite different from the other shallower wreck sites. There are various soft corals, sponges and large sized starfishes. The water temperature was 15°C in August, so dry suits must be preferred. Due to its location near the entrance of Dardanelles Strait, strong surface current towards may be challenging depending mainly on the season.

Diving to AE2, technical diver competency is required. Prior to diving, it is mandatory to make proper preparations and be accompanied by a diver guide who knows the area well. The bottom gas trimix mixture must be adjusted to this depth and deco gases nitrox and pure oxygen cylinders and emergency procedures must be ready to use. A large diving boat is necessary for technical diving equipment and it must be adequate to interfere in emergency response (Figure6).

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Dive plan report
-----------------------------------------
Bühlmann zh-l16 A, GF 30/85
Max depth: 70 m OC Dive
Altitude: 0 meters - Salinity: 35 ppt
Water density: 1025.97
70m, 15min, TX 16/47 OC Tank#1, Gas weight:  4.3 Kg. (24 l./230b/5520 l.)

Deco gases list:
----------------
EAN 50, @22 meters, Tank#2, Gas weight:  2.2 Kg. (7 l./230b/1610 l.)

Projected decompression:
-----------------------------------
DEPTH     GAS TYPE PRESSURE  TIME  RUN
-----------------------------------------
  70m  TX 16/47    142 Bars  11'   15'
  33m  TX 16/47    138 Bars   1'   20'
  30m  TX 16/47    135 Bars   1'   21'
  27m  TX 16/47    132 Bars   1'   22'
  24m  TX 16/47    129 Bars   1'   23'
  21m  EAN50       221 Bars   1'   24'
  18m  EAN50       205 Bars   2'   26'
  15m  EAN50       191 Bars   2'   28'
  12m  EAN50       178 Bars   2'   30'
   9m  EAN50       156 Bars   4'   34'
   6m  EAN50       124 Bars   7'   41'
   3m  EAN50        68 Bars  15'   56'
   0m  EAN50        68 Bars        57'

Start CNS:    0,0%  - OTU's:    0,0
Final CNS:   17,8%  - OTU's:   46,4

GAS CONSUMPTION LIST:
-------------------------------------------------------------
 No GAS TYPE                CONS      ∩ WEIGHT       RESID.
-------------------------------------------------------------
  1 TX 16/47 OC           2419 l. (- 1.9 Kg.)         129
  2 EAN50 OC              1137 l. (- 1.5 Kg.)          68

   TOTAL USED GAS WEIGHT:         (- 3.4 Kg.)

First leading compartment: C02@33
Last leading compartment : C09@3

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Figure 6. A dive profile sample for Irresistible

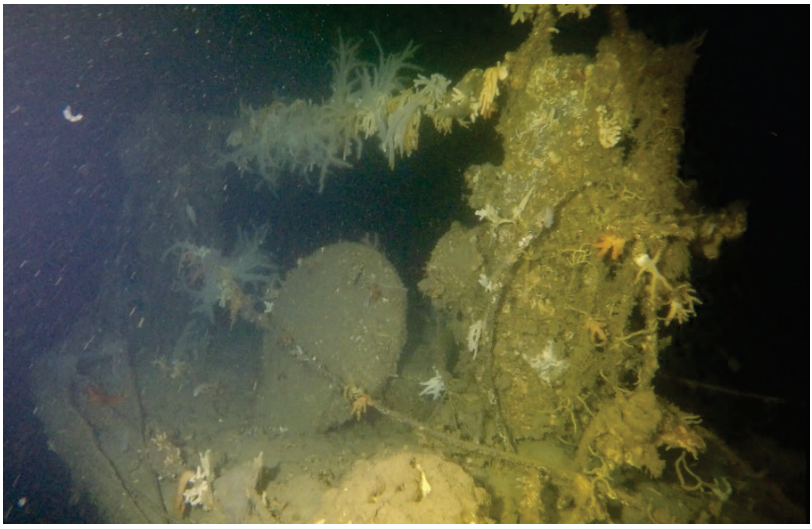


Figure 7. The open hatch and the extraordinary fauna of AE2

HMS MAJESTIC

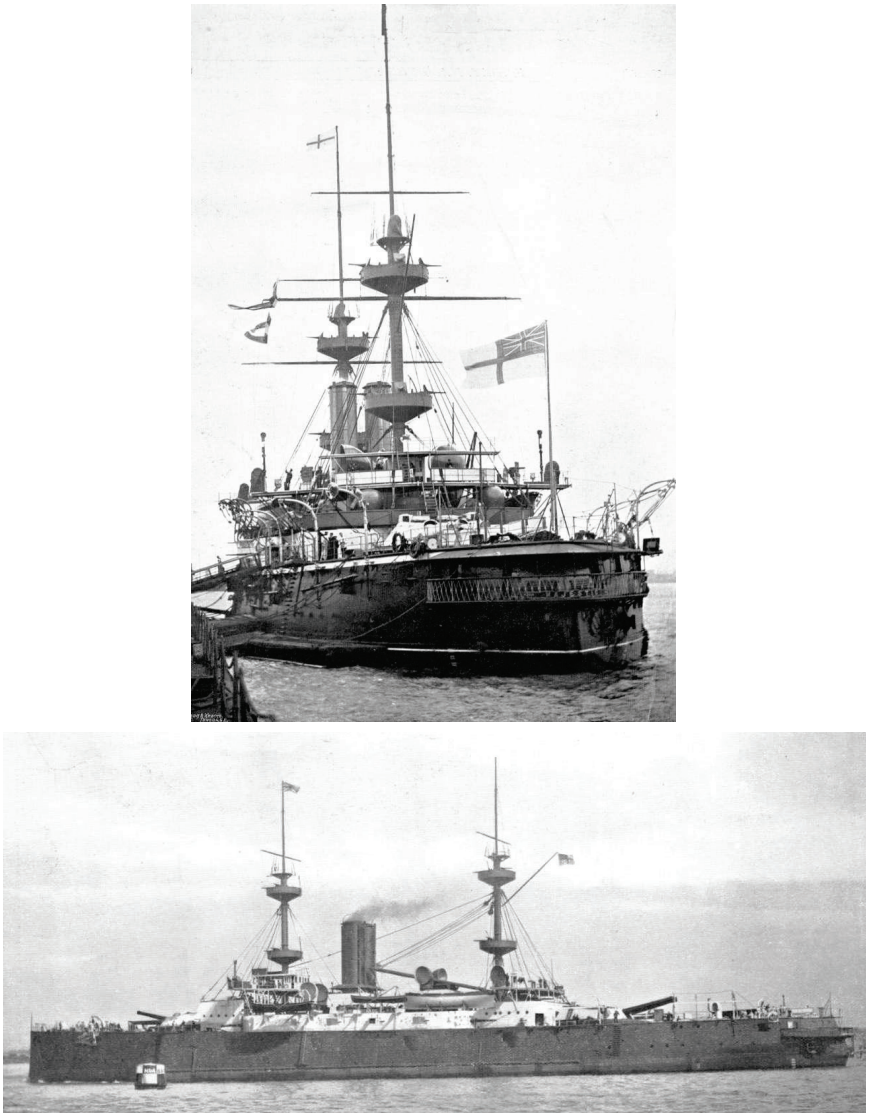


Figure 8. Majestic-class battleship HMS Majestic (Liman 2023)

Despite the oppositions of Churchill in the first place, regarding the ship is too old for a battle, he was convinced by the officials and HMS Majestic was assigned to the Dardanelles Campaign on 1st February 1915. She arrived at the Dardanelles strait on 25 February and served for the British Royal Navy until May 1915.

Her Majesty's Shipping (HMS) Majestic was one of the largest ships of that period (Figure 8), weighing 16,060 tons, being 118,87 m long, 22,86 m wide, 8,23 m high and capable of a speed of 16.5 knots. Two BL 12-inch Mk VIII guns with two forward 12 turrets (Figure 9) 4 with 12-gun machine, 12 with 6-gun machine, 16 with 12-gun pdr machine, 12 with 3-gun pdr machine, 2 maxim. She was a ship with heavy armament, having 2 2-pdr boat machine guns and 5 torpedo tubes.

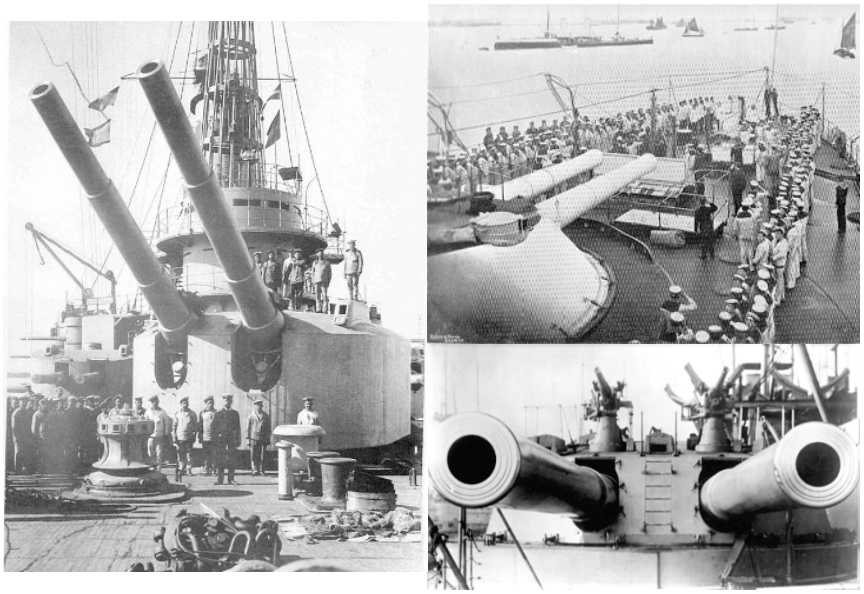


Figure 9. Heavy armament of HMS Majestic (Liman 2023;Adelante 2023)

HMS Majestic's tragic end is told in detail, in the first chapter of this book. She now rests in eternity at a depth of 24 m, off Seddülbahir Mehmetçik Lighthouse of the Gallipoli Peninsula (40º 02.647 N, 26º 09.909 E).

However, the ship could not maintain its integrity. It was dismantled within the scope of the legal regulation regarding the salvage of the wreckage of ships sunk in Turkish territorial waters and the collection and sale of war scrap and materials. Its huge cannons, many of its cannonballs, its deck and valuable parts were cut off, sent to Istanbul and sold. In addition, some of the remaining parts were taken by scrap dealers and fishers of the period. Even this plunder and the time passed through, it is possible to recognize the locations of the cannons, the cannonballs, turrets places, a part of the wheelhouse, and the steel cables (Figure 10).

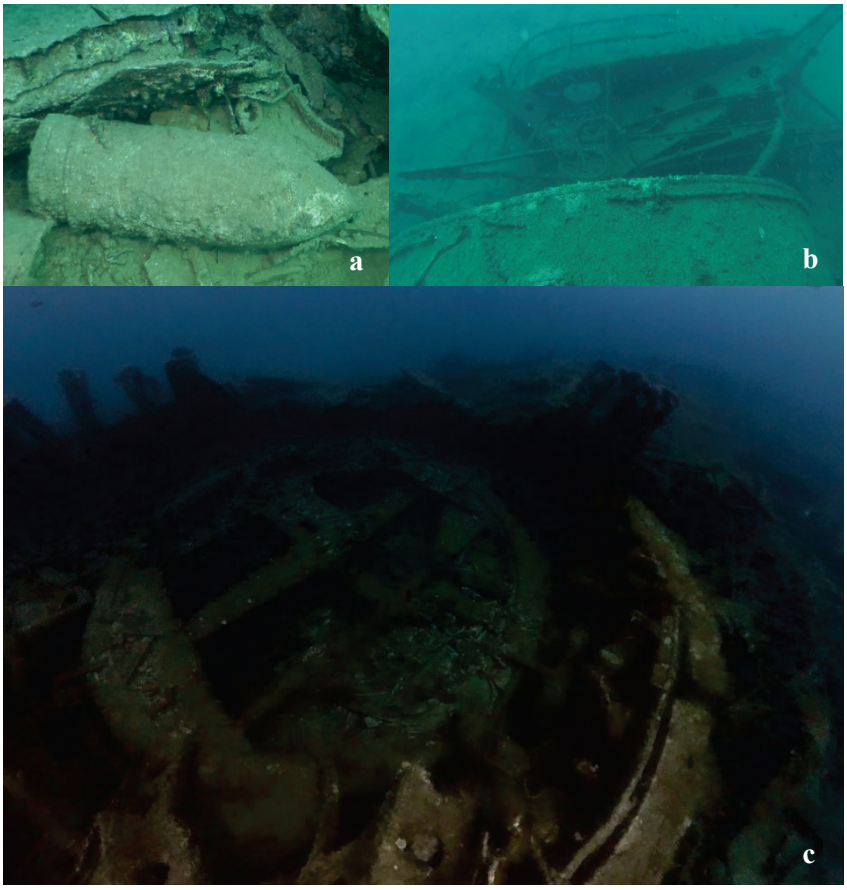


Figure 10. a) A cannonball, **b)** the wheelhouse remains and **c)** a turret base of HMS Majestic

HMS Majestic wreck is within the limits of sportive diving; this will appeal to those who are involved in many diving sports. In order to dive, it is necessary to take one of the diving tours serving in Çanakkale. It is possible to reach Mehmetçik Lighthouse by road, but a boat is needed from the pier of the lighthouse to the wreck location.

The sea current on and around the shipwreck can be strong from time to time, and since it is open to southwest winds, it is crucial to make plans prior to dives and to take guidance. While the surface water temperature is 23ºC in August, it may decrease to 17ºC due to the thermocline (crystal) layer at the bottom.

LUNDY

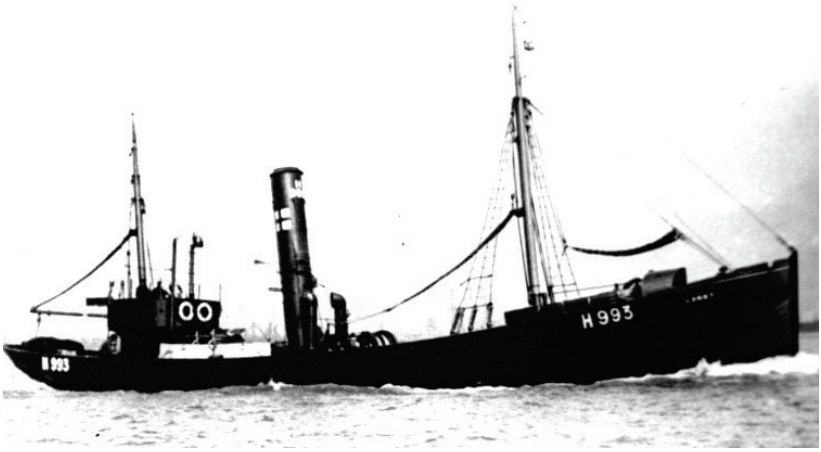


Figure 11. Minesweeper trawler Lundy (Kolay *et al.* 2015)

Lundy, a pre-war fishing ship, was built in Beverley with a length of 33.68 m and a width of 6.55 m (Figure 11). For the World War 1, on May 1915, she was converted into a minesweeper. During the battles were at their higher intense in Anafartalar region, she took on a minesweeping mission and moored off Suvla Bay. On 16 August 1915, Lundy sank after smashing her stern into the propeller of a cargo ship, Kalyan (Kolay *et al.* 2015).

Lundy's wreck is lying at 28 m depth in Suvla (Anafartalar) bay of the Gallipoli Peninsula, between the Büyükkemikli and Küçükkemikli capes, 6.2 nautical miles from Kabatepe port (40º17.872 N, 26º12.913 E). Lundy maintains a straight silhouette. (Figure 12) It has parts such as the anchor and windlass at the bow, the windlass and machinery in the middle, and the propeller at the stern. (Cover photo and Figure 12) The surrounding area is sandy and underwater visibility is around 20 m.

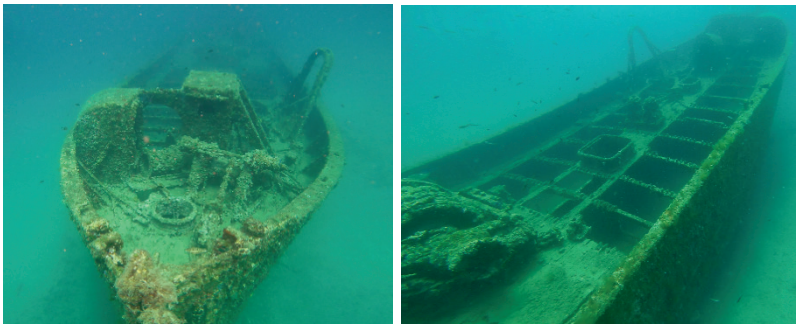


Figure 12. Lundy sits straight on the sandy bottom with the windlasses and machinery

Lundy is within the limits of sportive diving. The average sea water temperature in August is around 16 ºC. It is open to north-east winds coming from Suvla Bay, there may be a wavy sea surface depending on the winds. It serves as one of the richest biodiversity spots among the Dardanelles Shipwrecks (Figure 13).

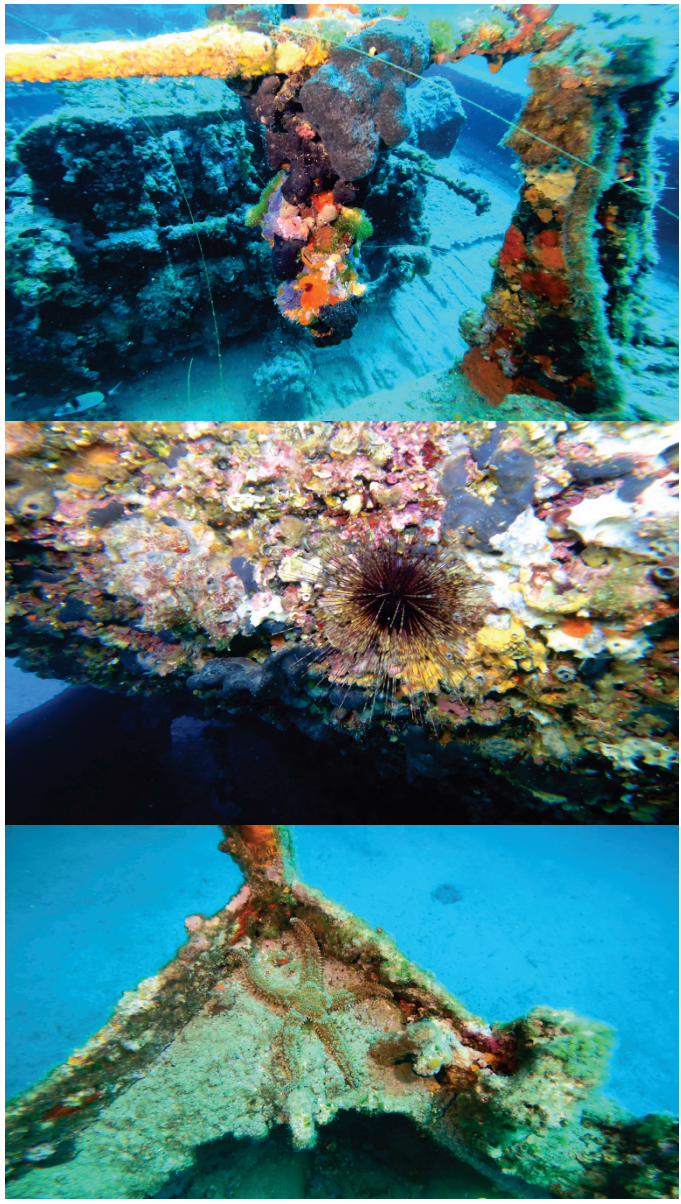


Figure 13. The rich biodiversity all over the Lundy's wreck (continued on the next page)

Figure 13 continued. The rich biodiversity all over Lundy's wreck

SS MILO

Figure 14. SS Milo and the temporary pier (Liman 2023)

SS Milo, a cargo steamer with a length of 73.3 m and width of 8.9 m was released to serve in World War 1, and was dispatched to the Dardanelles. After being a vessel for transporting supplies, on 26 October 1915 she had the most interesting duty, which she would assume all throughout the course of the Gallipoli Campaign. SS Milo had been filled with concrete to serve as a breakwater and defend Arıburnu Harbour and the ships against harsh weather. Then a small pier had been constructed between Milo and the land, finally the electricity generated on SS Milo is used to lighten the beach (Figure 14). She was broken up and sunk after the war.

SS Milo's wreck is lying at a maximum depth of 5 m in Anzac Bay, Arıburnu, Gallipoli Peninsula (40°14.610 N, 26°16.586 E). Its distance to the shore is 139 m. Only the hull section is remained, other parts were removed by scrap dealers and were disintegrated over time as it could not withstand the sea and weather conditions.

SS Milo is in the shallows; the shipwreck is clearly visible from the surface. It is the ideal depth for beginner divers and snorkelers. The ship's hull and frames are clearly visible. The surrounding area is sandy and visibility is around 20-30 m. Since the seawater temperature in August is around 23°C, shorty suits can also be suitable for diving. The location of shipwreck is a sheltered place in Anzac Bay so there is no current. The prevailing wind is northerly, but the wreck is close to the shore, so it is not much affected by weather and sea conditions. Snorkelers and scuba divers encounter a rich biodiversity on and around the wreck. The site is covered by a healthy and dense sea-grass meadow.

Starting the dive from the ship's shore side, from the south, the ship's frames and sea grasses will be the first things to be recognized (Figure 15) When reached to the middle part, conger eels and brown meagers can be observed under the hull, an underwater flashlight is necessary. As you proceed towards the stern, it is possible to see the remaining parts of the pier and the wreck (Figure 15). When you move to the starboard side of the shipwreck, the side of the ship and its frames are standing at full length.

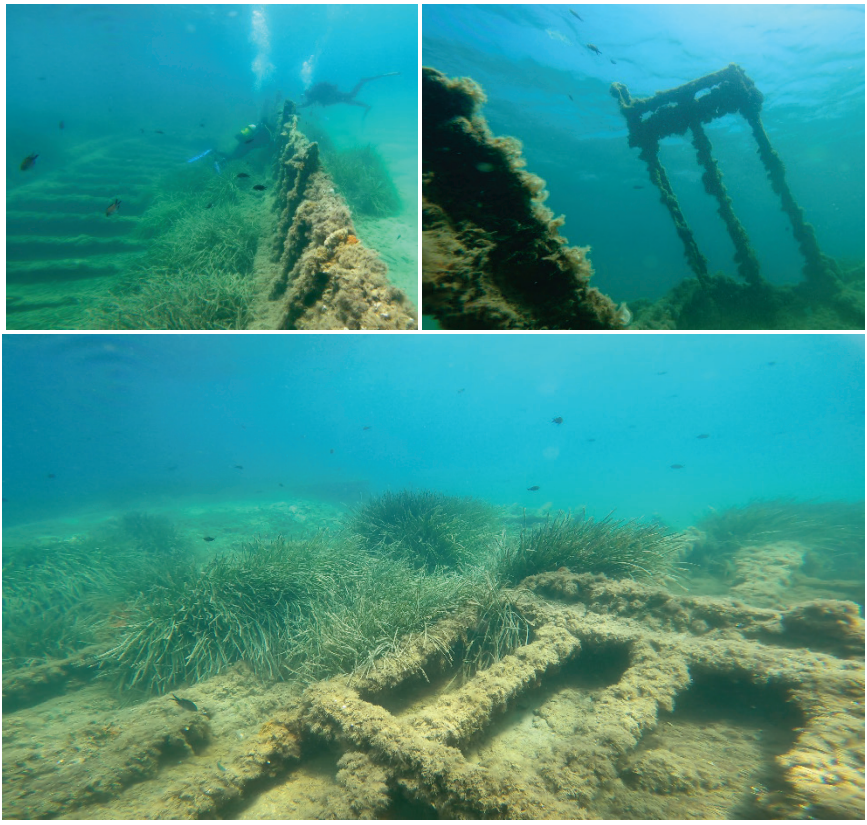


Figure 15. Dense and healthy patches of sea grasses in and around SS Milo wreck and the remains of its frames

LOUIS

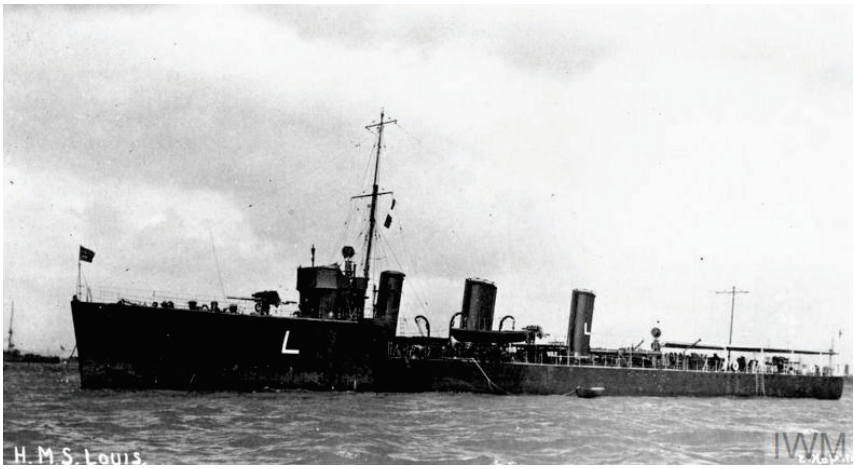


Figure 16. Laforey-class destroyer Louis © IWM Q 75138

On 30 October 1915, Louis Destroyer (Figure 16) arrived at Suvla Bay, on the same day in the evening she collided with a tugboat due to harsh weather conditions. After 5 days long salvage efforts, Louis was abandoned on 4 November 1915. She is now lying parallel to the shore at a depth of 18 m in Suvla Bay (Anafartalar Port), south of Büyükkemikli Cape, Gallipoli Peninsula, (40°18.815 N, 26°13.559 E).

Louis was a 81,9 m long, 8,4 m wide destroyer with a hull of steel and equipped by 4 Yarrow boilers along with the shafts and steam turbines. After the war, some parts of the Louis shipwreck were removed by scrap dealers and some of it was disintegrated over time as it could not withstand the sea and weather conditions. The remaining bow of the ship and the Yarrow boilers are completely recognizable (Figure 17).

The wreck site is approachable only by boat. It is 30.3 miles from Çanakkale center and 7 miles from Kabatepe port.

Wreck is in shallow water and can be seen from the surface when the sea is calm and clear. It is at the ideal depth for those new to diving. Underwater visibility is between 15-25 m. The surface water temperature is about 23°C in August; however it may decrease due to the thermocline (crystal) layer at the bottom. To protect from the sudden change in water temperature, full suits are required for diving. Since the location of the wreck is the south of Büyükkemikli Cape in Suvla Bay and it is close to the shore, it is not affected much by sea and wind conditions. Currents can be experienced from time to time.

The bow of the wreck, which is closer to the shore, is situated towards the east and the stern is towards the west. Starting the dive from the bow, the bow and upper foredeck will be the first to be seen. Most of the wreck is buried in the sediment. As you proceed from the starboard side of the wreck towards the stern, the first Yarrow boiler will be seen. The boilers are lined up in a row and remain mostly intact. The surroundings of the boilers are rich in biodiversity, it is possible to observe sponges, corals, cuttlefishes and sea slugs (Figure 18). Through the crack on the second boiler, which was opened during the war, its interior can be seen from the bow side. As you move towards the stern, after the last boiler, you will realize that there is no rear stern. It was torn apart and scattered due to the war, scrap dealers, the weather and water conditions all along the 108 years.

Figure 17. Yarrow boilers of Louis Destroyer

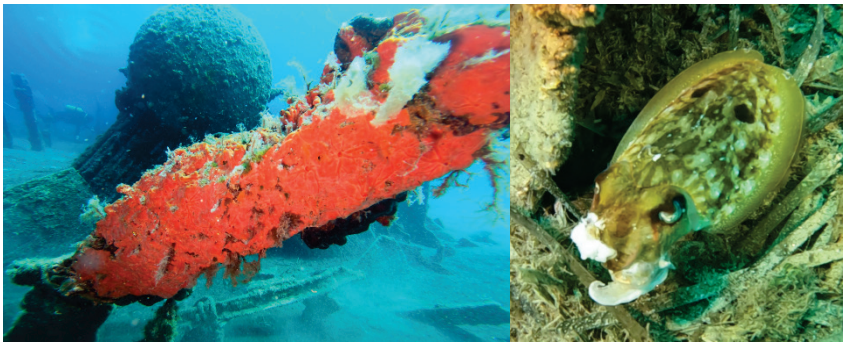


Figure 18. Biodiversity around Louis - on the right a cuttlefish half eaten by probably a conger eel, which was also observed as a resident of the wreck.

THE HELLES BARGES

Figure 19. Barges were used to carry port construction materials, ammunition and other supplies, along with the troops (Kolay *et al.* 2015, © IWM)

After the disastrous defeat at the Naval Battle of Dardanelles Campaign, the landings were targeted as the second base of the Campaign. On 24 April 1915, a large group of cargo ships and other vessels were set out from Bozcaada to Gallipoli Peninsula, to transport troops and supplies (Figure 19). On the next day, soldiers of the landing craft approached the land but immediately encountered fire from Turkish artillery. According to Kolay *et al.* (2015), the two barges are thought to be sunk at that time.

The barges' wrecks are resting off Gelibolu Peninsula, in Tekke Bay (W beach) (40º02.969 N, 26º09.807 E). They are located one behind the other, one at 28 m depth and the other is at 26 m depth. Both maintain their silhouettes. They are close to each other and their distance between is approximately 30 m. Their distance from the coast is about 1625 nautical miles. The dimensions of the barges are; smaller one 18 m long, 5.8 m wide; bigger one 23.5 m long and 6,6 m wide. Both their frameworks are made of steel, the rest wooden decks have all been rotted away. Although the place where they are sunk is slightly inclined, they remain straight.

The surrounding area is sandy and visibility is within 20 m. While the sea water surface temperature is around 23ºC in August, the water temperature may decrease due to the thermocline (crystal) layer at the bottom. Barges' location is open to currents from time to time. The prevailing wind is northerly and the

wrecks are not close to the shore, so diving must be planned in accordance with the weather and sea conditions. A marine vessel is necessary to reach the site.

The wreck's anchor on the starboard is recognizable. On the bow of the pier, the materials it used brought ashore during the wars can be seen. Even if the barges are small in size, the biodiversity is quite rich. While the top is covered with a variety of sponges, it is possible to see creatures such as conger eels, forkbeards, seabreams and lobsters under the hull (Figure 20). An underwater flashlight is necessary.

Figure 20. Helles Barges present a colourful and rich biodiversity

ARIBURNU LIGHTER – MULE BARGE

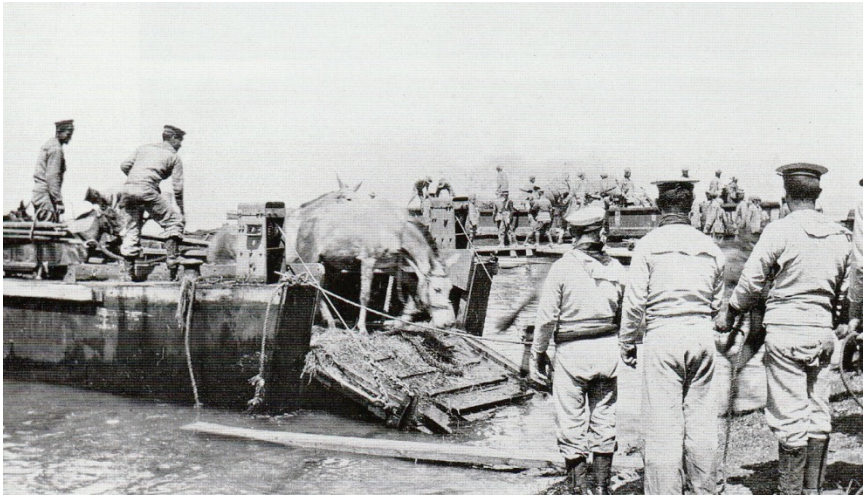


Figure 21. These vessels were also used for transportation of animals (Kolay *et al*. 2015, © IWM)

Arıburnu Lighter, which is thought to have been sunk by the British during their withdrawal from Arıburnu, is 11.40 m long, 3.45 m wide, and 1.30 m high at the gunwales. These vessels, with a steel framework, are also called 'mule barges' since the presence of an access ramp in the fore of the vessel that is used to ease the transportation of the supplies and animals (mules, donkeys, horses) (Figure 21). Its wreck is approximately 0.7 nautical miles away from the shore and its lies at 18 m depth (40°15.647 N, 26°20.693 E).

A boat is necessary to reach the dive site. Average surface water temperature in August is 23°C, however the bottom temperature is 18°C due to the thermocline (crystal) layer. Divers should prefer a full suit. There is almost no current and the wreck sits on flat ground. It is surrounded by *Posidonia oceanica* meadows and, over and around the wreck the biodiversity is quiet rich. Sea slugs, seabreams, scorpion fishes, conger eel, and colourful sponges can be seen (Figure 23). The wreck site is within the sportive diving limits and it is appropriate for intermediate level divers. Although it was able to preserve its structure as much as possible -that the access ramp and the gunwales help to imagine the total silhouette- due to a boat's careless anchoring the starboard of the hull was torn apart (Figure 22).

Figure 22. The broken starboard and the rope that caused the hull to torn apart (top right)

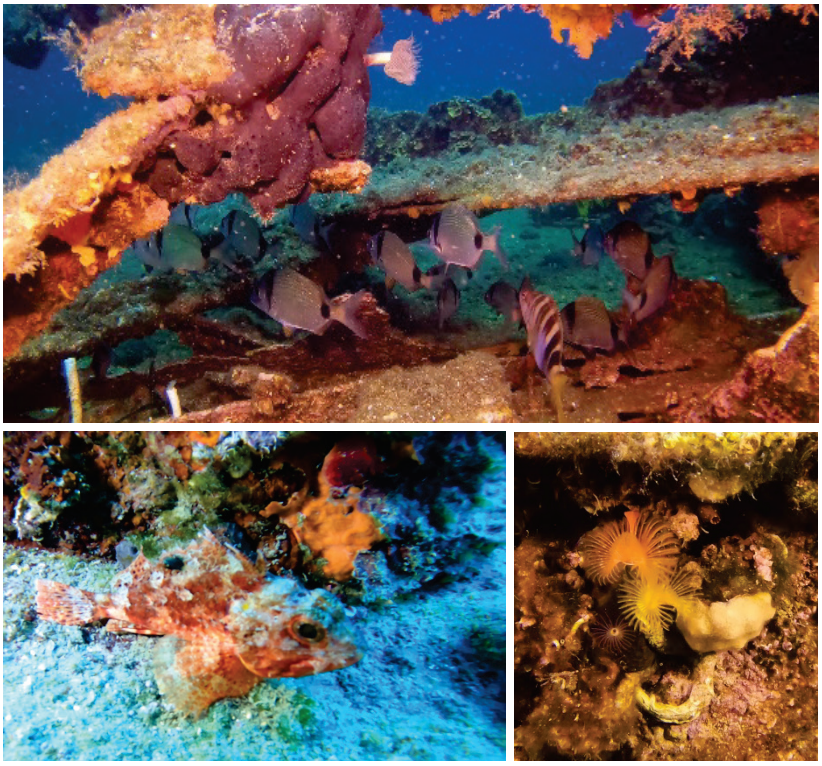


Figure 23. The rich biodiversity on and around the Arıburnu Lighter (Mule Barge)

ARIBURNU BARGE

This is another auxiliary vessel used to transport supplies and animals. It has been found at 28 m depths, off Arıburnu region (40°14.816 N, 26°15.407 E). Wooden parts are completely rotten but 17.4 m long and 6.25 m wide structure stands tall on the sandy bottom.

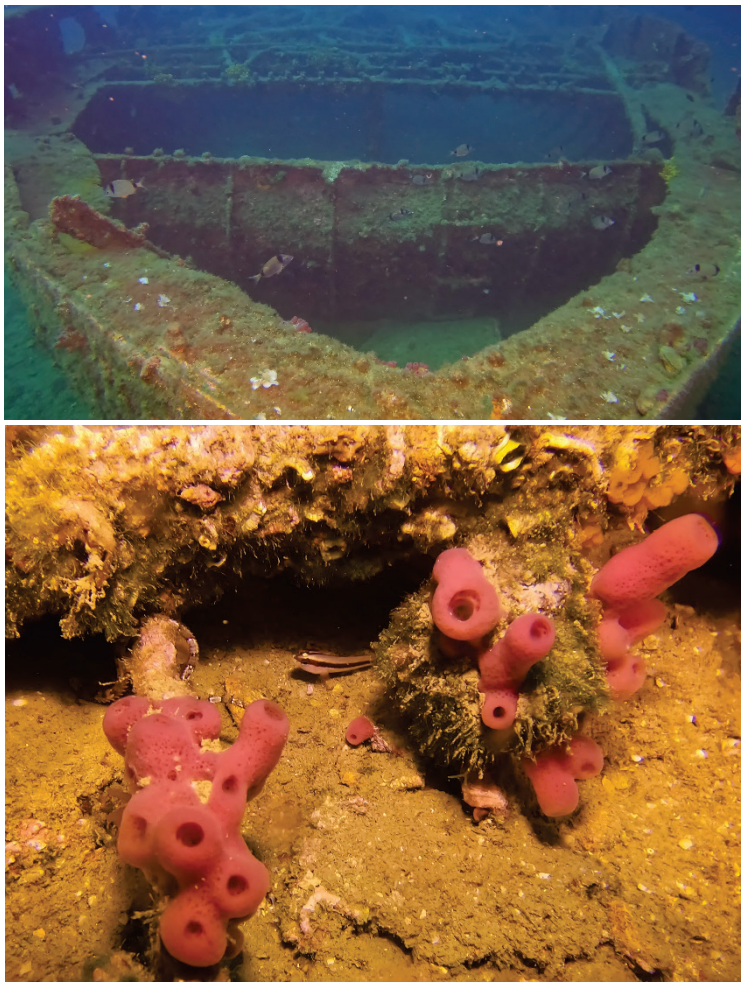


Figure 24. Both inside and the outside of the boat are rich in biodiversity, hosting various kinds of creatures

UNKNOWN WRECK

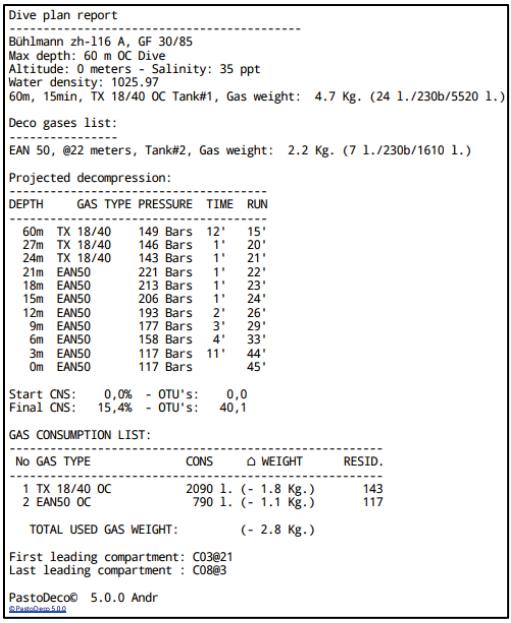
This unidentified shipwreck is discovered 0.7 nautical miles away from the Alçıtepe-Sarıtepe coast, at a depth of 58 m. It is 17 miles from Çanakkale, 7.4 miles from Kabatepe port, and 4.7 miles from Seddülbahir port (40º05.943 N, 26º11.158 E).

This wreck's identity has not been determined yet. It is 46.3 m long and 7.2 m wide. Considering the structure and dimensions of this single-shaft and steam-powered ship, it can be considered as an offshore fishing ship used by the British as a minesweeper (Kolay *et al.* 2015). The shipwreck is well preserved due to the depth. The uppermost part of the wreck is at 49 m, the deepest point is at 58 m. It lies completely flat on its hull (Figure 25). Thanks to the clear waters of the Aegean Sea, the silhouette is visible in the first 20 meters. Two warehouses are open in the middle and front parts. At the stern, the engine and propeller and shaft are intact. The rudder and its equipment can also be seen. It is one of the shipwrecks that have a rich biodiversity. There are various sponges, barber fish, moray eels and seabreams (Figure 25). As it is offshore, there may be currents from time to time. In August, the water temperature at the bottom is around 16ºC. There are ghost nets at the bow and at the port bow (Figure 26).

In order to dive to AE2, within the scope of technical diving procedures, divers need to have technical diving certificates and dives should be carried out under the leadership of a diver guide. A large diving boat is necessary for technical diving equipment and it must be adequate to interfere in emergency response.

Figure 25. The marine biodiversity on the Unknown Wreck.

Figure 26. Marine biodiversity and ghost fishing on the Unknown Wreck



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Dive plan report
-----------------------------------------
Bühlmann zh-l16 A, GF 30/85
Max depth: 60 m OC Dive
Altitude: 0 meters - Salinity: 35 ppt
Water density: 1025.97
60m, 15min, TX 18/40 OC Tank#1, Gas weight:  4.7 Kg. (24 l./230b/5520 l.)

Deco gases list:
----------------
EAN 50, @22 meters, Tank#2, Gas weight:  2.2 Kg. (7 l./230b/1610 l.)

Projected decompression:
-----------------------------------
DEPTH     GAS TYPE PRESSURE  TIME  RUN
-----------------------------------
  60m  TX 18/40    149 Bars  12'   15'
  27m  TX 18/40    146 Bars   1'   20'
  24m  TX 18/40    143 Bars   1'   21'
  21m  EAN50       221 Bars   1'   22'
  18m  EAN50       213 Bars   1'   23'
  15m  EAN50       206 Bars   1'   24'
  12m  EAN50       193 Bars   2'   26'
   9m  EAN50       177 Bars   3'   29'
   6m  EAN50       158 Bars   4'   33'
   3m  EAN50       117 Bars  11'   44'
   0m  EAN50       117 Bars        45'

Start CNS:    0,0%  - OTU's:    0,0
Final CNS:   15,4%  - OTU's:   40,1

GAS CONSUMPTION LIST:
-------------------------------------------------------------
 No GAS TYPE              CONS     ∆ WEIGHT      RESID.
-------------------------------------------------------------
  1 TX 18/40 OC          2090 l. (- 1.8 Kg.)       143
  2 EAN50 OC              790 l. (- 1.1 Kg.)       117

   TOTAL USED GAS WEIGHT:         (- 2.8 Kg.)

First leading compartment: C03@21
Last leading compartment : C08@3

PastoDeco©  5.0.0 Andr
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Figure 27. A dive profile sample for the Unknown Wreck

Discussion

For divers all over the world exploring a sunken ship is a thrilling and unique experience and the most iconic wrecks are those submerged in history and tragedy. No matter how precious the diving experience is, it is not possible to get into a completely different state of mood when faced with the remaining parts of a battleship under the water. It is literally like touching the history and experiencing those moments. We as the residents of Çanakkale are privileged to be able to easily reach and experience these mixed emotions. No matter how strong those feelings are, finally and unfortunately there is very little information on the historical diving sites of ours. The one and most comprehensive study is Kolay *et al.* (2015) that almost every author in this book had already cited. Kolay *et al.* (2015) using the modern underwater imaging technology gathered a unique information about 33 shipwrecks and explained them in detail with images of theirs and through the collections of museums from all over the world. The stories behind those ships were also expressed thoroughly, shedding light on how the course of history has changed. The starting of Gallipoli Historical Underwater Park Project is another development to be appreciated. We believe there will be more to come as initiatives studying for the same purpose.

On the other hand, studies on technical diving are also very scarce in national literature (Mirasoğlu and Aktaş 2020). It is mainly restricted to only medical analysis, which is also expressed Mirasoğlu and Aktaş (2020) as inadequate. Regarding the increase in massive structural projects, technical dives are thought to get more importance and studies would be crucial to be done.

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