

Exploring Trincomalee Harbour



Trincomalee Harbour situated on the northeast coast of Sri Lanka is the fifth largest natural deep-water harbour in the world. It is steeped in history, legends and beauty. Its strategic importance in the Bay of Bengal has shaped its long history with many sea battles to control the harbour.

Wildlife, wrecks, forts, fortifications, lighthouses, naval dockyard, piers, jetties, storage facilities and other constructions are all part of the harbour's rich heritage. It is one of the best natural harbours in the world, showcasing so many scenic bays and coves that border its coastline in tranquil waters with pristine beaches overlooked by highlands. Then, there are scattered wooded islets that appear to float on water, and picturesque headlands with rocky outcrops and rich tropical forests that confer serenity on the landscape.

Trincomalee's name and its long history are more mystery and legend and sometimes highly debated. The name comes from the Tamil word *Tiru-kona-malai*: *Tirukona* (triangle or three peaked) or *tiru* (sacred) and *mona* (lord/chief or peak), and *malai* (hill or rock). While it is conjecture at best, these may be references to the rock on the promontory shaped like a triangle, or the hills surrounding the harbour that form a triangle or a hill situated at the end of a natural land formation resembling an arc, or even a reference to the town's ancient Koneswaran Temple. It is an anglicised form of the Tamil word *Tiru-kona-malai*, literally meaning "lord of the sacred hill", "sacred peaked hill" or even "three peaked hill".

Ancient texts, as well as an inscription unearthed by archaeologists, showed references to a Gokanna in Sanskrit, also known as Gonaka. The earliest known reference to the port of Gokanna was from the fifth century BC in the Mahawamsa, the great historical chronicle of Sri Lanka. The Greek cartographer Ptolemy, a second century Greek scholar, marked the harbour as Bokana on his map. It is evident that second century mariners knew the harbour.

Past and Present

Trinco, as it is popularly known, has been a seaport since ancient Sri Lankan Kings. It has attracted great seafarers like Marco Polo and others from China and Arabia. The harbour's strategic importance in the Bay of Bengal has shaped its history. The Portuguese (in 1612), Danes (in 1620), Dutch (in 1635), and the French have each held dominion at various times until, finally, the British took over in 1795. In 1775, a midshipman on board the MNS *Seahorse* sailed into Trincomalee bay and gushed: 'the finest harbour in the world'. That midshipman later became a distinguished admiral in the British Colonial Navy and was none other than Lord Nelson (1758-1805).

The Danish arrived in Trincomalee at the end of 1619 on a ship called *Oresund* under the command of Roelant Crape. This small expedition was the vanguard for another Danish fleet, composed of four vessels and three hundred soldiers, commanded by Ove Giedde, that reached the Island in May 1620. They wanted to try their fortune in the Asian seas. The Danish expedition occupied Koneswaram temple, and it was here that the Danes built the foundations of the fort but were later expelled by the Portuguese.

The British believed that through Trincomalee a strong naval force could secure control of India's Coromandel Coast. This was because any attack by sea coming from the northern Bay of Bengal would have to face a head sea while vessels from Trincomalee could travel faster with a stern sea and repel the attack.

Prior to World War II, the British built a huge 100-tank oil storage facility spread across an area of approximately 1,000 acres of jungle near Boom Cove, China Bay. The port city of Trincomalee, including the Naval Dock Yard, was developed during World War II for the main British Royal Navy

fleet base and shore headquarters of the Eastern Fleet. On 9th April 1942, Japanese aircraft under the command of Admiral Chuichi Nagumo attacked Trincomalee harbour targeting the oil storage tanks and sank three British warships anchored there. In December 1944 the Allied submarine fleet moved in.

From 1950 onwards, for well over a decade, the seas off Trincomalee and the Bay of Bengal, would be teeming with ships of the Commonwealth navies ranging from ocean minesweepers to cruisers, submarines and aircraft carriers for six weeks in the year. In 1956, Trincomalee Harbour was handed over to the Sri Lankan Government to be developed as a commercial port. In 1957, the Trincomalee Naval Base was reluctantly handed over by the British Royal Navy to the Ceylon Navy and joint exercise training with the Commonwealth navies continued for another couple of years.

After the Indian Ocean was declared a sanctuary for whales in 1979, the Centre for Research on Indian Ocean Marine Mammals (CRIOMM) was established at Clappenburg Bay in 1983 with the dual purpose for researching marine mammals and recreational whale watching. Besides Clappenburg Bay, there are several vantage points in the outer harbor, making Trinco the best location in Sri Lanka for land-based sightings of whales and dolphins. Also, in Clappenburg Bay was the Ceylon Sea Anglers Club which has now been converted to the Sri Lanka Air Force Eagle's Bay Resort.

Present Occupation

Trincomalee Harbour is home to the Sri Lankan Eastern Command naval base in the northern and eastern slopes covering an area of 1,000 acres a Sri Lankan Air Force base at China Bay and a small Sri Lanka Army base at Plantain Point and Clappenburg Bay. The Sri Lanka Navy handles security within the harbour waters.

Besides its strategic importance, Trinco is an important port of economic value. The Prima Flour Co. at Talpenburg Hill, the Mitsui Cement Co., together with the Ceylon Petroleum Corporation and IOC oil storage tanks are located and operate within the harbor area. The fisheries harbor is located at Mangrove Cove in Cod Bay.

At present, the Sri Lanka Ports Authority (SLPA) runs the complete administrative control of the port and environs except for the areas occupied by the Navy, Air Force and Army. The Port of Trincomalee works on a 24-hour basis. It is open every day of the year, except on May Day, when only daylight navigation is open.

Inner and Outer Harbour

The harbour is somewhat obviously divided into two segments, the inner and outer harbour. The magnificent outer harbour entrance is guarded by two dramatic headlands, one to the north and the other the east, and there is a carriage path along the edge of these headlands.

In close proximity to the headlands is Chapel Island and Elephant Island to the north in Trincomalee Bay and Norway Islet to the east, between Shell Bay and Koddidiyar Bay. Elephant Island in Trincomalee Bay was once famous for elephants that swam across to it from the naval dockyard until 2001.

The entrance to the outer harbour is 10.2km (5.5nm) wide, and lies between Foul Point on the southeast, and Swami Rock on the northwest, the width gradually decreasing to 5.5km (3nm) between Norway Point to the southwest, and Chapel Island, on the northwest. This is where it has its approaches to the inner harbour northward and expands suddenly at Koddidiyar Bay to the south into which the *Mahaweli Ganga* (in Sinhala; great sand river) flows.

Trinco Canyon

The *Mahaweli Ganga* is the longest and largest river in Sri Lanka (335 km in length) and accounts for about 10% of the total river outflows into the sea. This river originates in the central hills and flows into the Bay of Bengal at Muttur, Koddidiyar Bay. It is where the first of a number of branching submarine canyons makes Trincomalee one of the finest nutrient-rich deep-sea harbours in the world. As such, Trincomalee harbour is famous for its marine mammals and whale watching from land as well as the sea.

Baleen whales, pilot whales, sperm whales, dolphins and even whale sharks are seen from time to time within the areas of the deep canyon and nearby bays. The canyon is more than 1,000m deep at the

harbour entrance and its shallow end near the Muttur coast is about 400m deep. The outer harbour is famous for marlin, trevally (*paraw*), tuna and grouper sportfishing. Hopefully one day this area will be declared a marine sanctuary to control development and maritime activities that harm the animals and their habitat.

The first-ever land based whale-and-dolphin watching station in Sri Lanka is reported to have been set up on Norway Islet in Koddigar Bay, Trincomalee, in the early 1980s. The location has the best possible line of sight for whales, directly overlooking the canyon, which begins east of Tambalagam Bay, runs between Norway Islet and Round Island, and continues northeastward east of Swami Rock. The station was manned during the daytime by a team of Japanese marine biologists, who, along with American and Sri Lankan colleagues, had commenced studying the whales of Trincomalee in 1983. Unfortunately, no documentary records of their work are known to exist.

Inner Harbour Entrance

The entrance to the inner harbour which faces southeast provides protection to the harbour waters from both northeast and southwest monsoon winds. Guarding the entrance to the inner harbour are a pair of projecting headlands over one km apart, rather like the twin figures of dwarapalas at the entrance to one of the temples in Anuradhapura. The inner harbour entrance narrows to about 500 metres wide at Ostenburg Ridge.



Ostenburg Ridge

Bays & Coves

The harbour itself is irregularly shaped with numerous secluded bays and coves along its coastline. The outer harbour contains Trincomalee Bay, Koddigar Bay (*aka* Circular Bay), Green Bay, Pearl Bay, Shell Bay, Marble Bay, Sweat Bay, Dead Man's Cove, Clappenburg Bay and Turtle Bay next to Kinniya bridge.

The beaches at Marble Bay, Sweat Bay, and Dead Man's Cove are considered to be some of the best unspoilt beaches in Sri Lanka with snorkelling over corals right off the beach. Green Bay gets its name from the colour of the water in the bay. Pearl Bay and Shell Bay were known for oyster shells (not the pearl variety) that were found until the influx of fresh water from the 1964 cyclone killed them off. The shells were ground into chunam for beetle chewing.

Within the inner harbour there is China Bay, Cod Bay, Powder Bay, Town Bay and several coves such as Snug Cove, Cat Cove, Malay Cove, Boom Cove, Railway Cove, Mangrove Cove, North Cove, Mud Cove, Yard Cove, Welcombe Hotel Cove, Minden Cove, Orlando Cove and Nicholson Cove. Powder Island, Little Powder Island and Powder Spit are located between Town Bay and Powder Bay. Sea horses can be seen in the shallow waters around Powder Spit. Plantain Point is located at the tip of the headland between Powder Bay and Yard Cove. Middle Point is located at the tip of the headland between Yard Cove and Cod Bay. Hot Point is located at the tip of the promontory of Talpenburg Hill where the Prima Flour factory is now located.

Town Bay is closest bay to Trincomalee town. Next to it is Powder Bay that gets its name from the appearance of the rocks along Powder Spit. Yard Cove used to be a shipyard. North Cove is the northernmost of three coves in Cod Bay. Mangrove Cove in Cod Bay has a small island of mangroves at its entrance. Marble Bay is named for its water surface that looks like a marble floor. Turtle Bay and Welcombe Hotel Bay are named after tourist resorts. Railway Cove is named after the Railway Pier and the nearby China Bay Railway Station. Snug Cove is a cosy shaped shallow cove that is well protected from the weather. Town cove is the closest cove to Trincomalee town. Boom Cove derives its name from the Boom Defence Company that was garrisoned there. They were responsible for placing and removing the boom across the inner harbour entrance to prevent submarines from entering. Malay Cove gets its name from the Malay regiment that was once garrisoned there. A seaplane landing strip is located at Malay Cove. Ostenburg derives its name from the fort that was built there.

Until the civil war broke out, a ferry service operated between Trinco town at Powder Bay and Muttur saving the need to take the land route across four ferries (Kinniya, Upparu, Gankaithurai and Aalengenai) that have recently been bridged.

Lighter Berth is located at Boom Cove, China Bay. A lighter is a type of flat-bottomed barge used to transfer goods and passengers to and from moored ships. Lighters were traditionally unpowered and were moved and steered using long oars called "sweeps" or cables and the motive power of surface currents. They were operated by highly skilled seamen called lightermen. Waaf Pier is in Railway Cove, China Bay. Boat Yard Pier is in Mangrove Cove, Cod Bay. Drum Pier is in Mud Cove, Cod Bay. Oiling Pier was used to refuel ships.

Orlando Cove is located between Sober islands. This was an area in which ships were refitted by a ship's own company, known as self refitting which included repairing, fixing, restoring, renewing, mending, and renovating an old vessel. Block and tackle connected between a tree trunk and mast were used to tilt a ship to one side so that half of the ship's bottom would be exposed for refitting.

The Marble Beach Air Force Resort has 40 cabanas that are linked through sandy pathways lined with green foliage which are designed to offer privacy. A path from the resort leads up to Diamond Hill where there is a panoramic view of the harbour and remnants of an old signal tower that is believed to have been built by the British during World War II.

Tambalagam Bay, is a very large bay where once you could have dived for Windowpane Oysters (*Placuna placenta*) is largely wide and shallow. Clappenberg Bay and inner harbour areas are also known to contain Black-lip Pearl Oysters (*Pinctada margaritifera*), Green mussels (*Perna viridis*) and Horse mussels. However the current status of these resources is unknown. Oysters and mussels consume plankton filtered from the water passing through their slightly opened shell. Since 2013, Barramundi or Asian Sea Bass, locally referred to as modha or koduva is farmed in sea cages at Tambalagam Bay by Kinniya bridge. Whale sharks and baleen whales entering Trinco harbour are known to have stranded in Tambalagam Bay.

Naval Dockyard

As one enters the main gate of the naval dockyard, on the right hand side is Pepperpot Jetty from where one boards a Navy boat to transfer to Sober Island resort or go on a harbour tour. The jetty was initially T-shaped and after the infamous cyclone on 23rd December 1964 was extended with to an L-shape pier. Its name may come from the sunken barges or from a construction at this location that resembled an ancient pepper pot.

TRINCOMALEE HARBOUR CRUISE TIMING AND TICKET PRICES SRI LANKA NAVY	
WEEK DAYS	1530PM-1800PM
WEEKEND AND PUBLIC HOLIDAYS	0900AM-1800PM
ADULTS LOCAL	Rs. 100
CHILDREN LOCAL (AGE 06-10)	Rs. 50
SCHOOL STUDENTS	Rs. 25
FOREIGNER ADULTS	20 \$
FOREIGNER CHILDREN (AGE 06-10)	10 \$

Navy House is the residence of the Commander of the Sri Lanka Navy. It overlooks a long lawn, Navy House pier and the entrance to the inner harbour. This Dutch house was purchased by the British Navy and renovated and extended. It was once the house of the Commander-in-Chief of the East Indies fleet.

In front of Norfolk House are the Inner Yard and Sagaing Pier. The Inner Yard was built by the British during the Napoleonic war in the early 1800s but no longer important to them after the Napoleonic war ended. Then again in the mid 1800s Trinco became an important coaling station; a place where sailing ships would unload coal for fuelling Royal Navy ships. Sri Lanka's first traffic light and clock tower is located in the area.

Sri Lanka's first squash court was built by the British at the now academy of Communication School. It has been renovated and is in use with other squash courts.

At the apex of Nicholson's Cove are three ancient Arab gravestones that date back to a 12th to 16th century AD Arabic settlement. Also, nearby are two ancient deep-water wells that supplied fresh water. Arabian sailing vessels transporting spices of the Far East to European markets called at Sri Lankan ports as they were half way in their long and arduous travel where it was a favourite port of call for re-fitting and water.

In 1920, the British began construction of coastal artillery placements on Ostenburg Ridge above the fort to protect the entrance to the inner harbour which had become a major base in the Bay of Bengal.

Mounted on the ridge were a 18-ton rifle muzzle-loading (RML) canon and a battery of three BL 6 inch Mk VII naval guns within casements and individual underground ammunition stores. The RML canon is now in the maritime museum at Hoods tower. A fire control tower which commands a 360 degree view of the area was used to direct artillery fire along with concrete quarters that were built for the gun crews of the Royal Artillery Coastal Regiments.

With the departure of the Royal Navy from Trincomalee in 1957, the operation of the guns were taken over by the 2nd Volunteer Coastal Artillery / Anti-Aircraft Regiment, Ceylon Artillery. The coastal artillery batteries were decommissioned in 1962.

The Sri Lanka Navy maintains some of the guns in functional order for symbolic reasons. In the 1990s the Navy developed the nearby location at Hoods Tower into a naval museum which has pieced together a montage of artifacts that include old weapons, maps, naval, military and medical equipment, some of which are centuries old. Much of the museum itself is housed on ground level and in underground casements built during World War II. Housed here is a collection of weapons, equipment and weapon systems used by the navy. Prizes of war on display include captured Sea Tiger attack craft, suicide craft, an all terrain vehicle and LTTE weapons.

Sober Island *aka* Pambuttivu or Pambativu. Sober Island is made up of two islets, Great and Small Sober Islands. On the western side of Great Sober Island, is the French pass, a strait (250m wide) through which the French Fleet sailed to escape as the English naval force entered through the Ostenberg channel.

Sober Island, apparently named after British Lieutenant S. Sober, is steeped in history dating back to 1672 when it was first occupied by French Admiral Jacob Blaquet de la Haye in 1672 and by Admiral Suffren in 1782. King Rajasinghe, after signing an agreement with the French, sent a large body of men to work together with them to build a fortified position on Great Sober Island.

The 175-acre island elevating nearly 200 meters from the sea level was called “Isle du Soleil” by the French meaning “Island of Sun”. The Dutch had forged a tug-of-war with the French to claim the island. After the Treaty of Paris in 1784, the British took over the island and later developed it as a military establishment. The British Navy and Army occupied the eastern and western halves of the island respectively.

As Trincomalee harbour became the home of the British Eastern fleet during World War II, the British fortified the island with a battery of guns and cannons. There are French graves, a fort, gun batteries and many more symbols of British occupation. Next to the fort are two interconnected fresh water wells whose source is a mystery. A submarine pipeline runs across the narrowest part of the French Pass between Great Sober Island and the China Bay mainland. A causeway once connected Great and Small Sober Islands between Orlando Cove and Sober Creek. Sober pass is the passage between the two islands.

In 2011, the Sri Lanka Navy developed Great Sober Island as a resort. It is a 10 minute boat ride from Peppercot Jetty at the main Navy base entrance. Arriving on Sober Island gives one the feel of arriving at a tropical resort, with its crystal clear turquoise waters, long pier and abundant marine life. The resort has 15 rooms in three categories with the highlight being the 2-storey reception and dining hall with large windows, almost at ceiling level.

There are two suitable beaches on Great Sober Island for swimming: Orlando Cove and Minden Cove. A set of steps built by the British lead down to Orlando Cove where, in the old days, ships did their self refits. In addition, one may explore the ruins and jungle on the island. Deer, porcupines, jungle fowl, water monitors, snakes including pythons and abundant bird life can be found. Crocodiles occasionally visit the island.

Lighthouses

The First Trincomalee Light had been established in 1845 at Flagstaff Point (Swami Rock) in Fort Frederick at a considerable elevation of 62.8m. The light was decommissioned when new lighthouses were built at Foul Point and Round Island, both locations being situated at the entrance to the harbour. The British then built five lighthouses in the harbour of which four remain and none are reported to be currently operational.

1. **Foul Point** (Kevuliya), Sampur: Built in 1863. Inactive and in a dilapidated condition. Findlay records that it was being built in 1861 and, when finished, the lighthouse would show a red light between southwest and west by south $\frac{1}{4}$ south where there was a hazard. A green light glowed as a

lead into the harbour via a 25m diameter round white-painted stone tower, 32m in height with lantern and gallery. The lighthouse is built in to five levels with steel stairs and located on a promontory marking the southern entrance to Trincomalee Harbour.

2. **Round Island**, Trincomalee Bay: Built in 1863 is inactive. Three flashes were emitted every 15 secs, white or red depending on the direction. Its focal plane is 31m with a range of 10 nautical miles. It is a round cylindrical masonry tower 21m high with lantern and gallery. The entire lighthouse is painted white. Located atop a small island in Trincomalee Bay, in the outer harbour. The Round Island lighthouse is important for it shows how lights were starting to be adopted, not just for marking hazards, but as leading lights at the entrance to ports. The white sector marked the proper line of entrance to the harbour. Accessible only by boat, the site and tower are closed to public.
3. **Chapel Hill**, Trincomalee Harbour: Date unknown and decommissioned. A white flash was emitted every 10 secs with a focal plane of 111m and a range of 10 nautical miles. The lighthouse was a white structure on a building. It was located at Manayaveli, on the hill of the north side entrance to Trincomalee outer harbour. A radar tower now stands in its place.
4. **Ostenburg**, Trincomalee's Inner Harbour: Date unknown and decommissioned, it had a 360-degree fixed red light. Located atop Ostenburg Ridge on the starboard side entrance channel to the inner harbour.

Elizabeth Island has a tower with an all round light. The site and tower are closed to public.

Forts & Fortifications

During the harbour's illustrious history there have been several fortifications located at Muttur, Sober Island, Ostenburg Ridge, Hoods Tower, and Flagstaff Point. The fortification at Muttur was completely destroyed in the 1600s.

1. **Fort Ostenburg** located within the Naval Dockyard was built either during the Portuguese period possibly by King Rajasinghe II (1629-1687) or by the Dutch and later surrendered to the British in 1795. It has a commanding view of the inner harbour as well as the outer harbour. The fort has been re-built and modified during different colonial rule. It has been called "the most powerfully gunned fort in Ceylon" with strong batteries at sea level and many guns on the ridge above. However little of it remains today.
2. **Hood's Tower** is named after Admiral Sir Samuel Hood who located a vantage lookout point from which enemy ships could be detected and subsequently bombarded. Within the old British gun site in Hoods Tower there is a small but well built fort with underground casements. It appears that this fort was repaired, modified and strengthened during different colonial times. Now it is home to the naval museum.
3. **Sober Island Fort** is a small fort built on a hillock with World War II gun positions and underground ammunition storage complexes. A bastion stands next to the main gunpoint and three tunnels lead to a complex of underground rooms and cells. It is in an abandoned state run over by jungle.

Wrecks

There are a number of wrecks of warships, aircraft, a floating dock and gunboats lying on the seabed of the harbour.

Lighters: Two sunken British lighters (like barges) are found near Pepperpot Jetty. Possibly two are still located at Mud Bay.

SS *Sagaing*: Part of the giant hulk of Screw Steamer SS *Sagaing*, another victim of the Japanese air raid can still be seen in the Trincomalee Harbour. She had to be beached following the attack, with her decks ablaze. She was later converted to a jetty known as Sagaing Pier (in front of Norfolk House for naval harbour craft and smaller vessels).

SLN Gunboats: Two Chinese build Navy Gun Boats sunk by limpet mine damage in the 1990's. This site is a rare twin site where two ships are side by side. This dive site is only accessible through the Sober Island Resort dive center.

Harbour Planes: Believed to be one British Hawker Hurricane and 2 Japanese Zero Fighters or VAL Bombers. These wrecks are only accessible through the Sober Island Resort dive center.

RAF Hawker Hurricane: Believed to be one of eight British RAF Hawker Hurricanes that was downed by the Japanese during the second attack on Sri Lanka by the Imperial Japanese Navy during World War II. Although it may be a boring dive for the average diver it is exciting for the wreck diver/historian. This dive site is only accessible through the Sober Island Resort dive center.

Admiralty Floating Dock 26 (AFD26), Trincomalee Harbour: The Admiral Floating Dock 26 was over 300 m long and 60 m wide with an 80,000-ton dry dock. It was known as one of the largest shipwrecks in the world. On the night of 8th August 1944, the dry dock sank due to an inappropriate sequence of pumping out the ballast tanks soon after HMS *Valiant* had come in for repairs and anti fouling. Apparently, although the operators knew that HMS *Valiant* carried most of her weight amidships, they were unaware that she had a full load of ordnance. They therefore began by pumping out the mid dock tanks first. Too much weight fore and aft (front and rear) and too much lift amidships caused the dock to break its back upwards into two. HMS *Valiant* was able to steam out while the dock was sinking but was too damaged to see service again.

Around 1968 a French company led by Victor Barook salvaged one part of the wreck which was about two-thirds in length and in shallower water. A third of the wreck still remains on the sea floor at a depth of 35-54m. Special permission is required in order to dive at this site and can be accessed from the Navy at Sober Island Resort.

British Warship: Forty years ago Sri Lanka's top scuba diver, underwater explorer and marine biologist, Rodney Jonklaas hit the headlines with his sensational discovery off Elephant Island, Trincomalee of what he described as a British warship well over 200 years old. Among his other underwater finds were several large cannons and a small pilot-anchor.

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Smuggler's Cove?

Wooden wreck with canon(s) at Shell Bay