Beware Reef Marine Sanctuary

Diver Guide

Acknowledgements

Many people contributed their knowledge, time and passion to put this Diver Guide Booklet together.

We are grateful for the assistance of Parks Victoria

Disclaimer

This guide was designed and produced by volunteers. Diving should only be carried out by certified experienced people and undertaken at their own risk. Depths, directions, GPS points and other information in this guide may not be completely accurate. Beware Reef Marine Sanctuary is a challenging place to dive, please take care.

For further information try: www.parkweb.vic.gov.au , www.heritage.vic.gov.au , Friends of Beware Reef Marine Sanctuary on Facebook.

Photography by: Friends of Beware Reef



Beware Reef Marine Sanctuary

Beware Reef Marine Sanctuary encompasses a series of pinnacles of granite rock rising 30 metres off the sea floor, with only a small section at its northern extremity rising some two metres above sea level. This underwater



mountain range runs for just over one kilometre to the south-east from the drying part of the reef, and the marine sanctuary that protects this unique reef covers an area of 220 hectares. The reef lies five kilometres to the south-east of Cape Conran and about three kilometres offshore from the beach at Yeerung River.

The reefs that lie below the surface are rich in marine life and habitat, with a unique mix of both warmer and cooler temperate species, due to its location between the Eastern Australian current flowing from the north and a cooler westerly current flowing through Bass Strait. To date over 350 species of plants and animals have been catalogued within the Beware Reef Marine Sanctuary.

Beware Reef Marine Sanctuary is part of a system of 13 Marine National Parks and 11 smaller Marine Sanctuaries created by the Victorian Government to ensure that representative samples of Victoria's diverse, distinctive and amazing marine environment are conserved for future generations.

These parks and sanctuaries protect 5.3% of Victoria's coastal waters, safeguarding important marine habitats and species, and complementing our world-class national parks system on land.

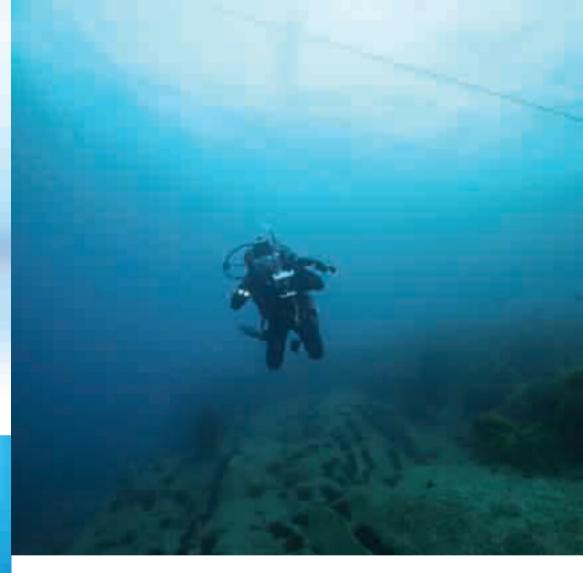
By keeping some of these marine areas in a natural state, free from potentially damaging human activities, we will protect these environments into the future. Parks Victoria encourages environmentally responsible diving practices including anchoring in an appropriate manner. Landing on Beware Reef is not permitted.

For the protection of the marine environment, the sanctuary is 'no take' and the removal of any fish species by any means, including abalone and crayfish is prohibited. Historic artefacts and shipwrecks are protected by law and must not be disturbed or collected. Heavy fines apply.

Friends of Beware Reef

The beginning of this group came out of a discussion on Australia Day 2005, about the underwater heritage lying within the boundaries of the newly formed Beware Reef Marine Sanctuary. This heritage was in the form of three shipwrecks:- the S.S. Auckland wrecked in 1871, the Ridge Park wrecked in 1881 and the steam trawler Brolga (Albert San) wrecked in 1926.

Over the past ten years since forming, the group members have given countless talks and presentations to a wide variety of interested groups from Flinders on Western Port Bay, to Mallacoota in East Gippsland and everywhere in between.



The group has also surveyed the marine life within all three marine parks of East Gippsland; Cape Howe, Point Hicks and Beware Reef. The survey results going into a nationwide data-base to be used by scientists, and managers of our marine environment and protected areas.

This booklet is designed to help share our knowledge and experiences of the Beware Reef Marine Sanctuary with divers who are not so familiar with its unique features.

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Overview

This guide is designed to cater for advanced divers who have a reasonable level of experience diving in deep water, currents and in open water situations.

The two shipwreck sites, (*Ridge Park & Auckland*) are each outlined in more detail; including site maps with GPS marks, depths and a suggested dive route.

The other two sites, (Seal Gully & Southern Pinnacle) are more exploratory dives, with less detail supplied, but offering the diver two vastly different experiences; one shallow and the other dropping off into deep water.

Each of the dive sites included are selected to give the visiting diver a cross section of what is on show below the waters of the Beware Reef Marine Sanctuary.

There are also many other great sites for the inquisitive diver to explore in the Beware Reef Marine Sanctuary, so go and enjoy!

Dive Safety

As with all water events safety is of paramount importance. Add to this the hazards that go with diving in an open water environment, and safety becomes an essential part of any planning.

Beware Reef sits in open ocean so your boat must have all the necessary safety gear on board, including some means of communication and an EPIRB if you get into trouble. Make sure your boat is up to the rigours of short choppy seas, ocean swells and is suitable for the number of persons on board.

If there is any doubt about the conditions above or below water, "DON'T GO"! Beware Reef is susceptible to strong currents, fresh winds especially from the east and heavy swells also from the south & east.

Below water can be challenging as well; adding flood water and algal blooms that diminish visibility for the diver. This is considered to be an advanced diver site, so ensure that all who dive there are advanced divers and also have some experience in the above conditions.

Make sure the dive is safe, as help is far away if a diving emergency should happen! In case of emergency call 000.

Conditions & Hazards

Beware Reef Marine Sanctuary is exposed to every wind and swell direction due to its location several kilometres offshore. In particular, south westerly fronts can hit without notice and strong easterly winds are common, especially in Spring and Summer. South-east ground swells can make diving unpleasant and dangerous.

Water temperature varies between 10°C and 21°C, with cold water upwellings common. These upwellings can reduce the water temperature and the visibility quickly.

Underwater currents caused mainly by tidal movements can be quite strong at times, especially when the tidal difference is large.

Boat Launch

There is a boat ramp at West Cape which is suitable for most vessels up to six metres and a 4WD is normally required for launch and retrieval. The ramp can be inundated with sand and kelp for short periods of time. Due to the shallow angle of the ramp, low tides can be difficult to launch and retrieve vessels.

The launch site is exposed to westerly/ south-westerly winds and ocean swells. Calm sea conditions with light northerly winds and higher tides is ideal.



How to get there

From the ramp at Cape Conran, avoid 'prop rock' which is about 50 metres directly out from the ramp and very shallow at low tide, and head south until you round the cape. Once clear of the cape head in an easterly direction for about 4 kilometres. The exposed section of Beware Reef is visible on a clear day once you clear the tip of the cape. Often whitewater can be seen breaking on the exposed reef before the bare rock itself is sighted.

Anchoring

When anchoring at Beware Reef it is important to ensure your anchor is secure before you enter the water and by checking your anchor once on the bottom. The diverse sponge gardens, with fragile corals and ascidians are easily damaged by drifting anchors, so it is important to allow plenty of rope, ensuring a good angle between your boat and anchor. This also ensures you have a boat to come back to after your dive.

When diving the wrecks, particularly the Auckland, your boat may be anchored close to the exposed section of reef. Check that the wind and currents are not pushing your boat towards the rock, there are already three wrecks to dive on!



Using this guide to navigate

This diver guide provides information on four of the main dive sites in Beware Reef Marine Sanctuary. It includes sketches, photos, bottom depths, anchoring suggestions and features of each dive site. Use this information to plan your dive and explore. There is plenty more to see at each dive site than is shown in this guide. Some divers may spend an entire dive on one feature and others may cover an entire wreck in one dive.

Plants & Animals

All plants and animals within Beware Reef Marine Sanctuary are protected by law. The marine plants are basically divided into three broad groups: Brown algae; Red algae and Green algae.

Green Algae are closely related to some terrestrial plants such as mosses, ferns and conifers. This particular group is less common at Beware Reef due to the physical nature of the reef and dominance of deep water, but a number of species are represented in some of the shallower sections of the reef especially around the exposed section to the north.





Brown Algae are the most common seaweeds seen at Beware Reef. They include most of the larger sized species attached to the reef, which is why they seem to dominate the shallower waters.



Red Algae are very common in southern waters and make up the largest group of marine plants. Identification of this species however is very difficult because it relies on differences between plant structures rather than overall appearances. The animals that live at the Beware Reef are not only very diverse but also incredibly colourful and numerous in body shapes.



Sponges, jellyfish, anemones, seastars, snails, sharks, crayfish, and everything in between inhabit the reef and show how diverse this place is.



The richness in diversity is due to the two main currents that hit the reef. From the south the reef receives the very cold and nutrient rich Antarctic Circumpolar Current.



The second main current, which influences the behaviour of plants and animals as well, is called East Australian Current. It moves warm water from the tropics down to the East Coast of Australia.



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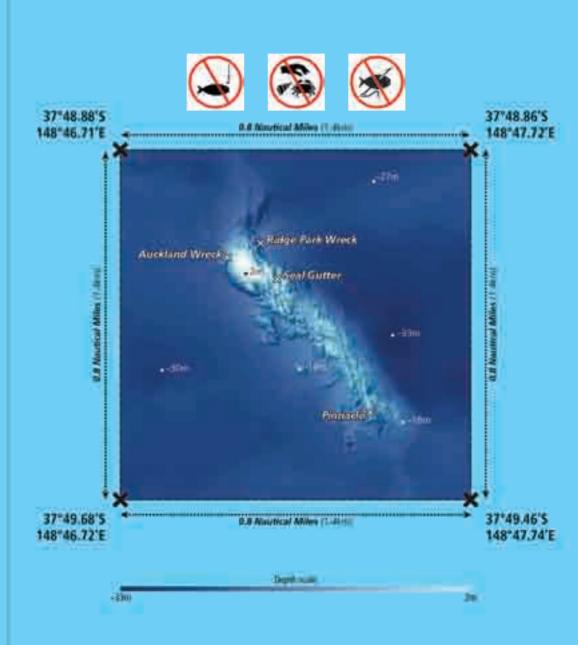


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Dive Site - S. S. Auckland



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History

The S.S. Auckland was an iron screw steamer of 699 tons built in 1863 at Low Walker on Tyne – Newcastle, U.K., by C. Mitchell & Co., on the dimensions of 212 ft. in length, a breadth of 28 ft. and a depth of 16 ft. 3 in. The steamer was initially fitted with a simple two cylinder, low pressure steam engine when sold to the Australasian Steam Navigation Co. in 1869. After being transferred to its new owner the Auckland underwent a major refit, extending the quarterdeck to the bridge to enlarge the passenger accommodation. The engine was also compounded to run at a higher pressure, the first time this modification had been undertaken in Australia.

On its first trip after this refit, the *Auckland* was returning to Sydney from Melbourne with 50 tons of iron, 500 bags of potatoes and 20 passengers, under the command of Captain Walker. On the night of the 27 May 1871, in thick weather with poor visibility, breakers were seen ahead looming out of the darkness. An attempt was made to reverse the engines but without effect and the *Auckland* crashed to a halt on Beware Reef, a few miles to the south-east of Cape Conran. The fore hold had been breached with the impact and was flooded, so the crew attempted to shift some cargo to the stern, to try to get the vessel to back off the reef but to no avail.

Sometime later another steamer was seen astern and blue lights and rockets were fired to draw its attention and the S.S. Macedon which successfully removed all passengers and crew and most of the mails from the stricken steamer.

A short time later the steamer Queensland with Captain Walker and some of the Auckland's crew returned to the site of the wreck to see what could be recovered. They reported that the vessel lay submerged in deep water with only the top of its masts still visible. The result of the subsequent official inquiry into the loss of the vessel, found that after the recent repairs and modifications the owner's had neglected to check the compasses which it was believed were made unreliable and as a result of this over-sight, Captain Walker was found not to be accountable for the Auckland's loss.



Suitable Conditions & Anchorage

The S.S. Auckland is located off the north-west side of the exposed section of reef. The reef protects the wreck in small south-east swells. The most suitable winds for diving this wreck are north-east to south-east.

The recommended anchorage is in about 14m of water, close to the exposed reef at the northern end of the wreckage. The GPS coordinates are \$37°49.160' E148°47.043'.



Diving the wreck

From the anchor point at the northern end of the wreckage, head south down a gutter for a short distance, then head west over the edge of a drop off where you will find the bow section. Continue south to the engine and head up into shallower water then north back to the anchor.

Features

All parts of the wreck are protected by law. The wreck of the S.S. Auckland is a stunning dive dominated by the large numbers and varieties of marine species as well as the following features:-



Engine

The engine is the largest intact piece of the wreck lying on its side at the base of the reef. This is a great example of an early Australian compound steam engine.

Propeller

The large four bladed propeller lies upright to the south of the engine, damaged but quite recognisable as such.





Ribs

This large section of the hull lies in a rocky gutter above the bulk of the wreck below. It is a good place to start your dive.

Boiler

A large boiler lies half-buried in the sand to the south west still relatively intact with only slight damage due to later salvage attempts.



Bow

The bow section lies at the northern end of the wreck site in 25m of water. The stem lies on its side with the winch lying on its end.

Anchorage (16m)

Lower Hu

Bow (26)

Auckland Site Plan

Don Love October 2011

S. S. Ridge Park



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The S.S. *Ridge Park* was an iron screw steamer of 969 tons, built in 1878 by Austin & Co. of Sunderland, England, on a length of 214 ft., a breadth of 31 ft., and a depth of 15 ft. 5 in., It was owned by the Black Diamond Line of Adelaide and traded mainly between Adelaide, Melbourne, Sydney and Newcastle as a collier.

On its final voyage the *Ridge Park* was travelling from Adelaide to Sydney with six passengers and a general cargo of mainly flour and brandy, under the command of Captain Heslop.

After leaving Adelaide on the 3 February, the *Ridge Park* called in at Warrnabool to take on a cargo of potatoes. After passing Wilson's Promontory, the weather grew hazy as the wind freshened from the northeast, with a heavy sea. Early in the morning of 10 February 1881 the steamer struck heavily on Beware Reef, with its head laying to the northeast. Within twenty minutes the engine-room was flooded, and the vessel sinking by the stern. The boats were ordered out, and all passengers, and crew successfully left the vessel, eventually reaching Gabo Island, where they were picked up by the steamer *Wentworth* and taken on to Sydney. The subsequent marine inquiry found the captain and mate guilty of careless navigation and their certificates were suspended for 3 months.

The hull and cargo were sold at auction and salvage began quickly with the S.S. Blackboy being sent to ascertain the condition of the wreck on Beware Reef and to see if salvage was worthwhile. As the conditions were favorable the recovery of the cargo began promptly being discharged into schooners alongside the wreck, however, by mid-March heavy southerly gales lashed the coast and the wreck slid of its ledge of rock and sank into deep water on the north side of Beware Reef. After the hull disappeared below the surface, some cargo was washed out and was deposited on the beach abreast of where the vessel sank, much to the delight of the local residents.

Suitable Conditions & Anchorage

The S.S. Ridge Park is located off the northern side of the exposed reef. The reef protects the wreck from small westerly and south-westerly swells. The most suitable winds light north to south-westerlies.

The recommended anchorage is in about 14m of water at the eastern end of the wreck, near the bow. The GPS reference is \$37^o49.092' E148^o47.050'.



Diving the wreck

The dive can be done from the boiler heading west along the wreckage towards the propeller and then work your way back up to the shallows and returning to your anchor.

Features

All parts of the wreck are protected by law. The wreck of the S.S. *Ridge Park* lies across the northern face of Beware Reef. Its remains have been heavily salvaged over the years but still provide some interesting marine life and maritime history for the diver.



Engine

The engine lies at the western end of the wreck-site. The crank-shaft, pistons, connecting rods and other machinery associated with the engine lie around it.



Beware Reef Marine Sanctuary – Diver Guide



Propeller

The iron propeller lies on the edge of the sand at the base of the reef. Most of it lies buried in the sand but can become more easily seen after storms have shifted the sand.

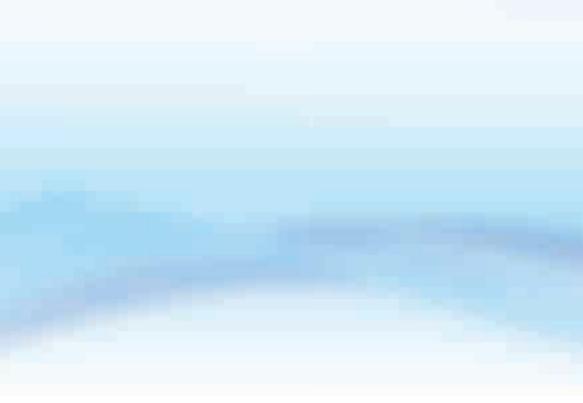
Winch

A well preserved winch for raising the anchors lies in the middle of the wreck site with a small section of the deck to which it is attached.

Hull

A large section of the lower hull lies along the north side of the reef in 16m of water







Seal Gully

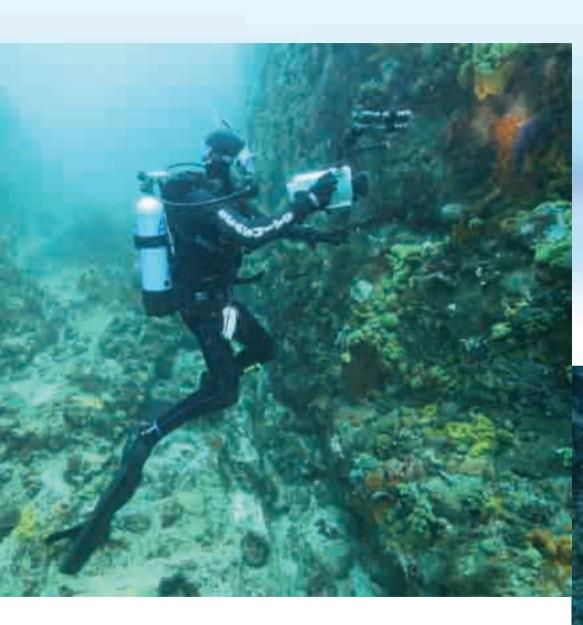
Seal Gully is aptly named after the Australian Fur Seals that often 'camp' at this spot when not hauled out on the drying section of Beware Reef. This site lies immediately to the south-east of the drying reef.

GPS coordinates \$37^o49.174 E148^o47.158. It is a large crack in the rock about 6m. deep that runs to the south for over 50m before broadening out into deeper water at its southern end This is a beautiful dive for small groups as the space on hand does not allow for much manoeuvring by the diver.

The top lip of the 'gully' is covered in cray weed and bull kelp so it is better to dive within the confines of the gully where the real action is. For the two walls of the gully are teeming with invertebrate life:- Jewell anemones, zoanthids, soft and hard corals, hydroids, bryzoan, sponges, and nudibranchs to name but a few.

The younger seals will always be inquisitive and will often come and take a look to check you out, so be ready with the camera for that special shot. Even though this is one of the shallowest dives, this site can be prone to extreme currents and heavy surges, so both divers and skippers of boats be aware of the conditions before entering the water. Seals are protected by law.



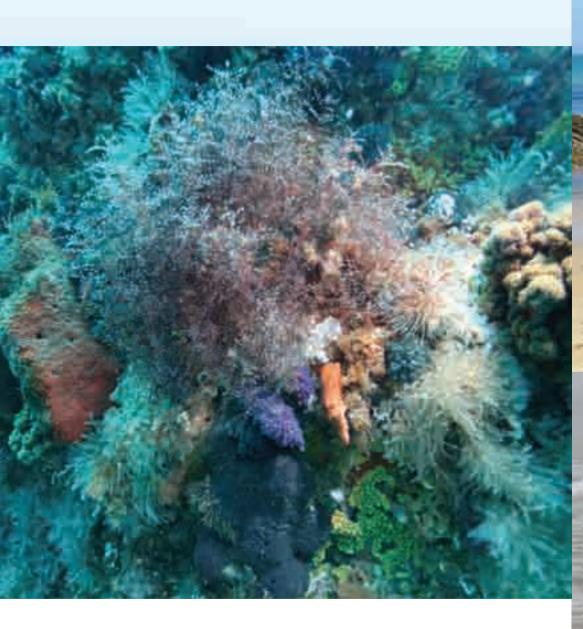


The Southern Pinnacle

This is the most southern portion of the shallow section of Beware Reef. It is dominated by a small dome of granite, that comes within 6m of the surface and due to its location is exposed to strong tidal currents and heavy swell from time to time. GPS coordinates S37^o49.458 E148^o47.450. There are extensive drop-off's that lie around the pinnacle mainly to the east, south and west. Once you get down below where the urchins have grazed the reef bare, there is much to see in the sponge beds for the photographer and exploring diver. Large sections of the rock face are covered with yellow Zoanthids, corals and sponges. So much so that many marine invertebrates seem to grow one upon the other.

The fish life on this site is dominated by mid-water species, such as the Butterfly Sea Perch, and Silver Sweep who feed constantly on the microorganisms floating past in the water column. Keep your eyes open for the unexpected, as many visiting fish species and some invertebrates not usually seen along our coast have been observed at this site from time to time. Large humpback whales can pass quite close to this pinnacle in their annual migrations to and from Antarctica.





Always keep an eye on the weather



Have a nice dive!