

Port Phillip Heads Marine National Park





Acknowledgements

Many people and groups contributed their knowledge, time and effort into making this Diver's Guide possible.

We are grateful for the help of:

- Friends of Beware Reef
- Coastcare Victoria
- Port Phillip Bay Fund
- Reef Life Survey
- Parks Victoria
- Scuba Doctor

Acknowledgement: Nick Bouma, Mark Rodrigue, Lachlan Cohen, Nicole Filby, Jillian Wheeler, Mary Malloy, Alan Wilkins, Allie Beckhurst and Don Love.

Disclaimer-

A great amount of consultation and effort was put in by many people to get this booklet right, unfortunately as with all guides, we may not have got everything perfect. The aim of this guide is to give a general overview to people of a variety of diving skills and abilities, to help them with selecting suitable dive sites.

This project was funded with the support of the Victorian Government.

Photography by:- Friends of Beware Reef, Mary Malloy, Bay City Scuba Club and Parks Victoria.

Front Cover: Mary Malloy.











Contents

Overview	2
Friends of Beware Reef	3
Port Phillip Heads Marine National Park	4
Boat Access	5
Dive Safety	6
Nepean Bay Overview	9
Nepean Bay Inner East (Radar)	
Nepean Bay Inner West	12
Nepean Reef	
Nepean Off-shore South - Sweep Reef	16
Lonsdale Wall Overview	19
Lonsdale Wall - Foggy Reef	20
Lonsdale Wall - Paradise Wall	22
Lonsdale Wall - Party Point	24
Lonsdale Wall - North Wall	26
The Springs	
Merlan Inner Reef	30
Point Lonsdale Township Reef	32
Point Lonsdale Light	34
Outer Point Lonsdale Reef	36
Glaneuse Reef	38
Popes Eye	40
Portsea Hole	42

Overview

The Port Phillip Heads Marine National Park and surrounding areas at the entrance to Port Phillip Bay is a truly spectacular world class diving destination with an astounding variety of locations and huge diversity of plants and animals, many of which are found nowhere outside of Victoria.

The entrance (Rip) is often characterised by challenging sea conditions which when coupled with very strong tidal influences, have contributed to the diversity of local marine life in the park. It also means that diving and snorkelling activities require both good planning and a knowledge of the dive site characteristics. This Divers Guide is designed to provide an understanding of some of the more popular and well-known locations, and has been written for those with a variety of diving skills, from the beginner snorkeler to the advanced SCUBA diver. The guide describes and outlines sixteen sites of varying difficulties that lie within the Port Phillip Heads Marine National Park.

The variety of diving locations includes snorkelling experiences at Point Lonsdale, shallow scuba diving at Popes Eye and Nepean Bay, through to deep and extreme tidal diving on Lonsdale Wall

and extreme tidal diving on Lonsdale Wall and Nepean Reef.

Not only is there a broad scope for various diving experiences but also sites chosen to cater for the diverse interests; from the underwater photographer, video maker, diving thrill seeker and those just communing with nature. There is also history aplenty in the form of shipwrecks on both Point Nepean and Point Lonsdale, for those who are into exploring the maritime past at the southern end of Port Phillip.



Use this information provided here to help plan your dive and explore, as there will be plenty to see for divers of varied interests. Some divers may spend an entire dive at one site whilst others may attempt more than one site over several dives. Given the importance of safety in any diving, do not rely on this guide alone for information to keep you and your companions safe, monitor local tide and weather conditions before diving.

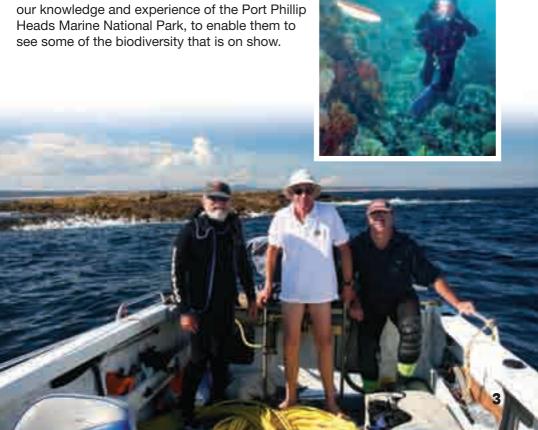
NOTE TIDES & WEATHER WILL DICTATE WHAT IS SAFE.

The Friends of Beware Reef

The Friends of Beware Reef group have been operating officially since 2005 in partnership with Parks Victoria. In the initial stages a lot of time was spent within the Beware Reef Marine Sanctuary endeavouring to catalogue the invertebrate and fish species that dwell there. In 2008 some of our members were trained to undertake Reef Life Surveys initiated by UTAS, as part of a ground - breaking Citizen Science initiative. Since then the group has been heavily involved in marine species monitoring at a variety of locations; Beware Reef Marine Sanctuary, Cape Howe Marine National Park, Point Hicks Marine National Park and Port Phillip Heads Marine National Park, and numerous other sites outside of the marine parks.

The Friends of Beware Reef has also partnered with the East Gippsland Catchment Management Authority, undertaking similar studies into the marine life of the Gippsland Lakes.

This book is designed to help those who are able to either snorkel or dive with air, to share Heads Marine National Park, to enable them to see some of the biodiversity that is on show.



Port Phillip Heads Marine National Park

Port Phillip Heads Marine National Park (3580ha.) is made up of six separate marine areas around the southern end of Port Phillip which includes popular dive locations at Point Lonsdale, Point Nepean, Popes Eye and Portsea Hole, as well as Swan Bay and Mud Island.

The park is managed by Parks Victoria and protects some of Victoria's most treasured marine and coastal environments and a wide range of habitats, including extensive rocky intertidal and subtidal reef systems, magnificent sponge gardens, kelp beds, extensive mudflats and vast seagrass meadows.

A variety of significant values are protected within the park, including intertidal reef platforms of high invertebrate diversity, abundant algal assemblages, threatened marine mammals, diverse and rich fish communities, numerous heritage-listed shipwrecks, sites of early scientific research, and frequent sightings of dolphin pods in the area.

The park provides many opportunities for visitors to enjoy and appreciate these values, and makes important contributions to Victoria's parks system.

Port Phillip Heads Marine National Park forms part of a representative system of 13 Marine National Parks and 11 Marine Sanctuaries in Victoria established in 2002. These are highly protected no-take areas which cover approximately 63,000 hectares or 5.3% of Victorian state marine waters. The shipwrecks, scenic underwater seascapes and unique marine communities, including internationally recognised dive sites, are now safe within the park.

Parks Victoria encourages environmentally responsible diving practices including:

- anchoring in a safe and secure manner and avoiding dragging anchors.
- ensuring dive gear is well managed and not trailing along the bottom.
- applying the Check Clean Dry approach to boats and gear before moving to new locations, to help prevent the spread of marine pests.

Within Port Phillip Heads Marine National Park, fishing and all extractive or damaging activities are prohibited.

This includes all methods of fishing from the shore or at sea are prohibited, including fishing, netting, spearing, taking or killing of marine life. The taking or damaging of animals, plants and objects (artefacts) is also prohibited. Heavy penalties apply.

Boat Access

There are a number of access points to get to the many dive sites of the Port Phillip Heads Marine National Park.

Dive boat charters operate from Sorrento, Portsea and Queenscliff, and can be easily booked to take you to many of the more difficult to access sites.

For those who have their own trailable boat, there are ramps at Rye, Sorrento and Queenscliff that offer safe launch and retrieval facilities. Boat owners must be aware that conditions can change for the worse very quickly, and this can make boating in these waters dangerous. The waters around Port Phillip Heads are a "designated hazardous area" where additional safety measures, including mandatory wearing of a life jacket is required. Anchoring around Port Phillip Heads is not advised, and anchoring in the shipping channel is prohibited. Shipping channels and their approaches are high shipping hazard areas, boat operators should exercise caution and steer well clear in these areas.

Get to know these waters with safety in mind, before exploring some of the more challenging sites.



Dive Safety

As with most in-water activities safety is a number one priority for those who wish to snorkel and dive to enjoy its splendour. Add to this the extra hazards that can await the diver, who is entering a very different environment to that of dry land.

Diving from Shore: may appear as the safest of the underwater experiences to be had, but still some basic rules do apply:-

- Make sure somebody knows where you are.
- Be aware of the state of the tides as an incoming tide increases the swell size and may hamper your exit from the water.
- · Make sure you have a safe exit point.
- Dive only within your abilities and training.
- Divers should also be prepared for cold conditions as water temperatures can fall to 8 degrees in winter.

Diving from a Boat: Dive sites offshore offer a new set of challenges, especially when diving from a boat. The tides become an issue and must be understood and respected, by all. The skipper is responsible for all safety gear on the boat, and must ensure that the boat is capable of handling any likely unforeseen changes in conditions, such as wind and tide changes. The skipper of the boat should:-

- · Have a sound and well maintained boat.
- Plainly exhibit a diving flag, as this area is often subject to intensive boating traffic.
- Check all divers have well maintained gear.
- Ensure all divers have a plan of what they will do during the dive.
- Make sure all divers understand the tidal conditions.
- Have an exit strategy if things change.
- Not anchor in the shipping channel.

In case of emergency have either a radio or mobile phone available for instant use. In case of emergency dial 000.



Point Nepean Dive Sites



Nepean Bay Overview

This shallow section of the Port Phillip Heads Marine National Park is unique in many ways. It is essentially a protected estuary interacting with a more open ocean environment. Add to this the strong tidal influences that run along it's outer edge, resulting in a continuous water flow inwards and outwards, making this section of the marine park different.

The reef systems that lie in this bay are the remnants of sandstone strata that once formed a barrier across a river plain (now flooded) that the Yarra River flowed across in the past. But over the millennia, with successive flooding and then exposing of this area, we see today the remnants of rock platforms jutting out to the north into Port Phillip.

What is left of these rock platforms now lie underwater, with numerous ledges and undercuts for the diver to explore. The bay is a rich biodiverse marine environment that can only be accessed by boat. It is a great dive for the snorkeler and less experienced scuba diver.

- 1. Nepean Inner East (Radar)
- 2. Nepean Bay Inner West
- 3. Nepean Reef

Ocean Site

4. Nepean Off-shore South - Sweep Reef

Nepean Inner East (Radar)

- Boat Dive S 38'18.2549 E 144'39.5378

Suitable for snorkelling & Open water divers





This site lies mid-way along the bay that is situated on the north side of Point Nepean. It is one of the many sites that dot this section of the Port Phillip Heads Marine National Park. On land there is a radar station almost directly above the site. It can be dived on the in-coming tide but the swell usually increases markedly as the flood makes, so for the best dive it is better to do it on the ebb tide.

This reef is full of marine life and a large variety of fish species, including leather-jackets, wrasse, groper, pike and sweep. It is also a great place for exploring the colourful nudibranchs

that hide among the kelp covering the bottom. This shallow (ranging from 1 to 5 metres) site is great for both the snorkeler and the scuba diver due to the ease of diving, as well as the clarity of water. It must be pointed out that this site can only be accessed by boat, as shore diving is prohibited at Point Nepean.



Nepean Bay – Inner West

- Boat Dive S 38'18.2473

E 144'39.3508

Suitable for Snorkelling & Open Water Divers

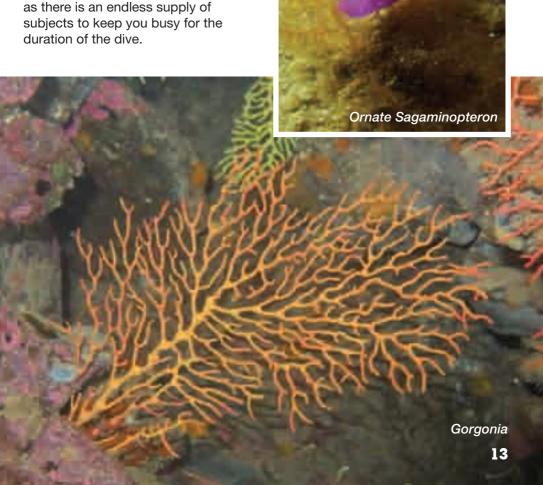
Point Nepean



he site here is a series of detached reefs that lie at the western end of Nepean Bay in quite shallow water. It can be dived by both snorkeler and scuba diver, but the latter must keep slightly further off-shore to enable some depth to operate in. The reefs here have deep undercuts and are full of corals, ascidians and anemones, as well as many fish species. Port Jackson sharks can be found in the breeding season in quite large numbers, sheltering under these deep crevices.

This is a great place for the Open Water diver who likes to take photos,

It must be noted that this site is exposed to tidal influences, so be aware that you may have to swim against some tide. It is best dived on the ebb tide, as the swell invariably increases on the flood tide.







This is probably one of the most taxing of the dive sites, due to the unpredictability of the tides that rip around and over this reef. It is strictly a boat and slack water dive, but due to a number of factors the slack-water can last only a matter of minutes or well over 30 minutes.

So plan your dive accordingly, with an exit strategy for not only the divers but the boat if things change for the worse. It is best to dive this site on the last of the ebb, early flood for not only if the slack is short but also it is much easier to be retrieved inside the Bay for your exit strategy rather than out to sea. the latter lying at the extreme western end, under Campbell Rock. The *Time* is dominated by two huge boilers lying in the middle of the wreck remains, and offers numerous photographic opportunities for the diver interested in shipwrecks. The remains of the *Campbell* are much smaller by comparison and lie mainly just to the immediate north of Campbell Rock.

This site is very dynamic and susceptible to severe wind and weather changes, which added to the strong tides make it a very challenging dive, and is only suitable for those divers who are experienced.







his is the largest of several reef systems that occur on the southern side of Point Nepean that stretch from Beacon Rock (Rip) to the Petriana Reef, one kilometre to the east. The most prominent of these is Sweep Reef, which lies midway between the above two points, and is easily marked by the swell increasing as it surges over the reef. The reef comes to within 3 - 4 m. of the surface in 9m. of surrounding water. It is a heavy reef covered in a myriad of kelps that is home to a large variety of reef fish and invertebrates. Sea sweep, leatherjackets and wrasse abound here, and large amounts of abalone and other shellfish graze the rock face.

This is strictly a boat dive and care must be taken to ensure the swell is not too great, for large waves do break on the reef and the surge below can make life difficult for the diver. It is best to dive here on the (falling) ebb tide when the swell tends to drop-off. When the tide is flooding, not only does the swell increase but a current flows from east to west as the waters flood into Port Phillip.

If in doubt do not dive this site, as over the years several dive boats have been overturned by large swells in this vicinity.







Lonsdale Wall Overview

The Lonsdale wall is a surviving remnant of what once used to be the bed of the Yarra River when sea levels were much lower during the height of the ice age. At that time, the Yarra river flowed through a plain where Port Phillip now lies, and as it flowed through the southern end it cut a steep gorge through the soft rock.

What we see today is the same gorge flooded with sea water lying between Point Lonsdale and Point Nepean. The Lonsdale wall lies on the western side of this flooded gorge, which extends for one kilometre and now gives divers of most abilities a chance to explore a multitude of unique experiences. There are numerous overhangs, canyons and ledges to explore, that are home to a myriad of fish and invertebrate species. The high levels of water flow are embraced by many fish species that live here, such as; Blue Devils, Leatherjackets, Sea Sweep, Parrot Fish, and the occasional Wobbegong Shark. The striking reefs are home to a plethora of invertebrates, dominated by sponges, soft corals, gorgonians of many varied colours and hydroids.

Much of this marine life can be hidden in the gloom of the vast overhangs so make sure you don't hurry and carefully look at everything, for you will always be surprised with the endless variety of marine life.

- 1. Lonsdale Wall Foggy Reef
- 2. Lonsdale Wall Paradise Wall
- 3. Lonsdale Wall Party Point
- 4. Lonsdale Wall North Wall

Shallow Water Sites

- 5. The Springs
- 6. Merlan Inner Reef
- 7. Point Lonsdale Township Reef
- 8. Point Lonsdale Light
- 9. Outer Point Lonsdale Reef
- 10. Glaneuse Reef





Diver on wall overhang

This dive site lies at the southern end of the Lonsdale wall, and is a slack-water flood dive. As with all Lonsdale Wall sites it is a dive for the more advanced diver. The top of the reef is only 8 metres in depth, but as you swim to the north-east you drop over the edge into 25 metres of water. All sections of the wall are heavily encrusted in a big variety of marine invertebrates, including soft coral, gorgonians, and sponges.

With outer Lonsdale Reef not far to the west, some marine history is also in evidence with a large anchor and two cannons for the diver to discover. and tidal conditions in the forefront of their dive plan. When diving this area always have an exit plan, many divers have found themselves a long way away from their boat and safety due to poor planning.

Pteronis incerta &

sponge





paradise Wall is another well known dive site on the Lonsdale Wall. It is at the shallowest part of the wall starting at 10 – 12 metres. This makes the site a great beginning site for the less advanced diver for there are numerous overhangs to explore at relatively shallow depths. Each overhang supports a plethora of marine life for the diver to observe. The site below this shallow section then drops away steeply into the depths.





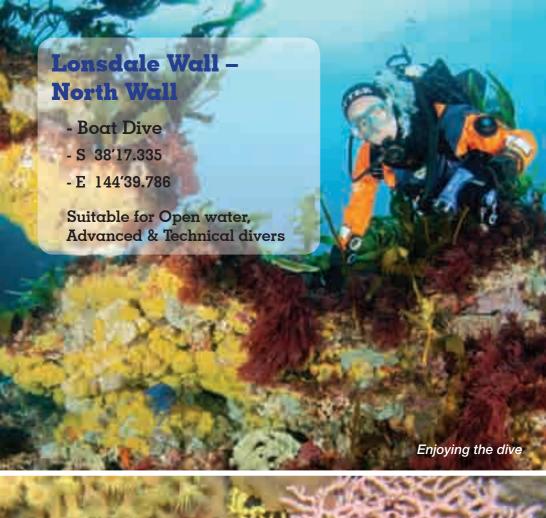


- Boat Dive S 38'17.4469 E 144'37.851

Suitable for Open Water, Advanced & Technical Divers Party Point on the Lonsdale side of Port Phillip Heads is a slack water dive, that is not in the shipping channel. Care still must be taken to ensure all divers are aware of the state of the tide, and their exit strategy at the end of the tide. This site can cater for the technical diver to reach 45 metres, and also both Open Water and Advanced divers to corresponding depths.

This is another excellent dive on Lonsdale wall. It is characterized by a near vertical drop-off that has extended out from the line of the wall. As you descend there is a series of large over-hangs every 6 – 9 metres as you descend down the drop-off. Each over-hang supports a great variety of marine life, both fish and invertebrates.







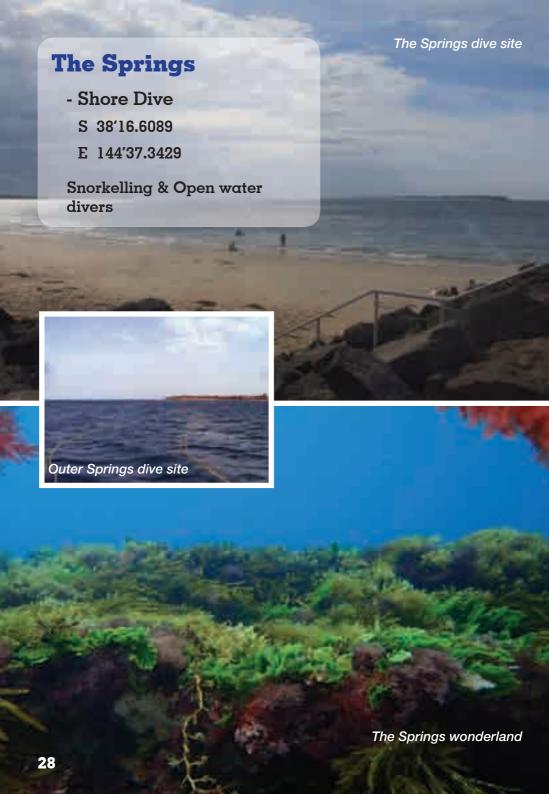
This site is the most northern of the Lonsdale Wall and one of the steeper sites. Once again it is a dive for the experienced diver as the depth drops to 60 metres, which is out of range for the average diver. The top of the wall is around 19 metres in depth and slopes down to the bottom at 60 metres.

The bottom as you descend is a maze of over-hangs, caves, and smaller crevices that support a vast plethora of marine life. These crevices are the home of many blue-devils and blue groper as well as an endless cross-section of temperate invertebrates.

It must be noted that part of this site lies within the Port Phillip Heads Marine National Park, whilst the remainder lies in the shipping channel. It is illegal to anchor in a shipping channel, so the divers must be aware of any shipping movements and plan the dive accordingly.

Western Blue Groper



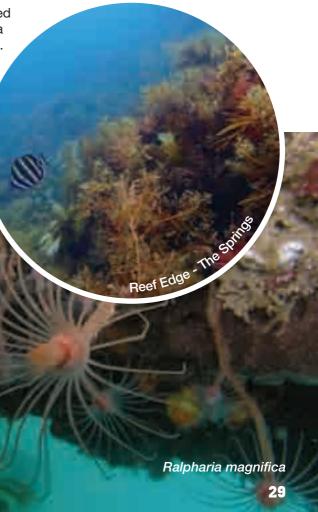


This site lies at the northerly end of the Point Lonsdale Section of the Port Phillip Heads Marine National Park. It is a major reef system that runs out from the shore for 300 + metres to the S.E. and stretches across the tide stream as it flows inwards and outwards. As a result, it can be dived either from a boat or from the shore especially on the ebb tide. During this period the tank diver can drop below the lip of the reef and swim in relatively current free water.

swim in relatively current free water.

The reef is split into two sections in which the inner reef is separated from the longer outer section by a small channel of about 30 metres. Just ensure that you maintain your direction for if you veer off your course and miss the reef you will have hectares of

Sea Nymph - Amphibolus antarctica meadows to swim over. Both reefs have a narrow ledge on the S.W. side stretching the whole length of them. Do not be surprised to come across large Wobbegong Sharks resting under these ledges, they often share this space with a plethora of fish life. This is a great little shallow water dive for the more in-experienced diver. But always remember to have an exit plan as with the tides running here you can end up quite a great distance from where you entered the water.



Merlan Inner Reef

- Boat Dive S 38'17.2401 E 144'37.1998

Suitable for Open Water & Advanced Divers



Merlan Inner Reef dive site

This is so named after a yacht that struck on Point Lonsdale Reef in the past and drifted ashore just to the N.W. of this reef. This is a boat dive that can be dived each side of the slack water. When a moderate swell is running keep clear of this site as the waves can break quite easily here, so only attempt when the swell is low.

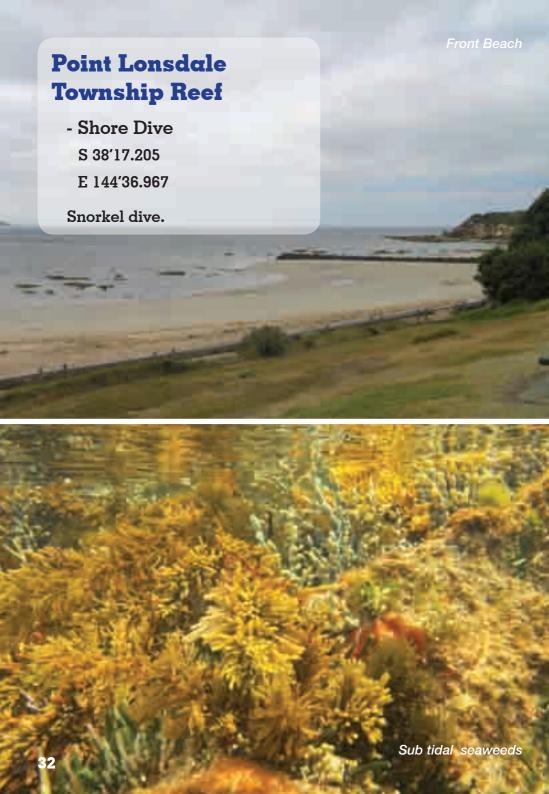
It is a series of small detached reefs that lie in 7 metres of water and come within 2 - 3 metres of the surface. Each reef is separate from the next and you can swim between the reefs quite easily, but just be aware of your location, because if you are swept away, it could be a long swim. The reefs have many caves, ledges and crevices to explore, so take your time to explore and investigate. Often you will see some big Blue Groper or a

large Crayfish, as well as many platesize Green-lip Abalone.

This is a dive for the open-water diver to explore a shallow reef system in relative safety. Just remember to plan the dive around slack-water when the currents are diminished.

Red Algae



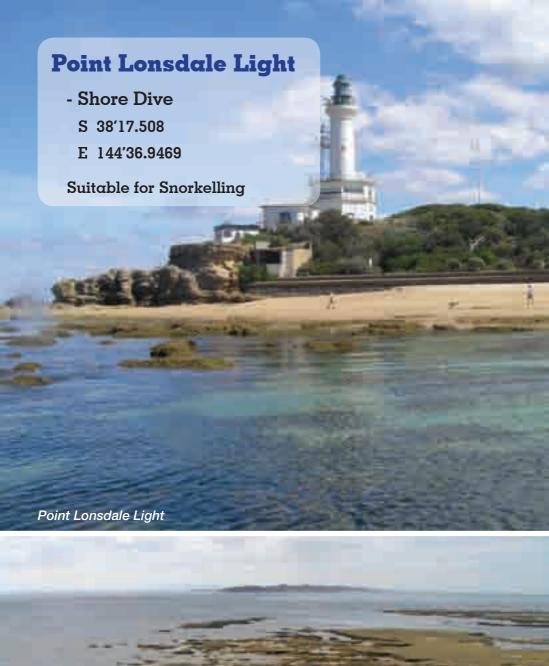


his is another beginner snorkel dive that is easy to access, when the tide is out. This reef lies just to the south of the Point Lonsdale front beach, where the cliffs begin. After going down the steps from the street parking, just walk along the beach to the south until you come to a small rock platform. Enter the water at a suitable place and follow the shallow reef around to the south. You can dive to any depth up to 5 metres, but if you venture out too far the tidal influence increases. There are lots of small fish that inhabit this low reef, so you may see the unexpected.

Do not dive here on the rising tide as the swell invariably increases as the ebb tide slackens. Do not attempt to dive if there is any hint of a swell, as you may upset the local surfing fraternity.







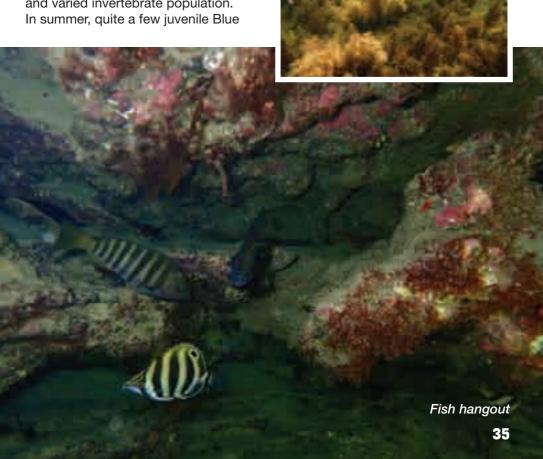
This is one of the more accessible sites for the beginner snorkeler. It is accessed from the Lighthouse car park, and lies between the Inner Lonsdale Reef and the pier to the north. When the tide is out you can access this site along the beach between these two points. Do not attempt this dive with the incoming tide washing in over the Point Lonsdale Reef, as you will be easily swept away.

The Sea floor here is covered in a large variety of sea weeds dominated by Sea Nymph - *Amphibolus antarctica*, thus giving much shelter to the many juvenile fish and a large and varied invertebrate population. In summer, quite a few juvenile Blue

Groper make this site their home, as well as Blue-throat Wrasse, Moonlighters, Scalyfin and Magpie Morwong. The invertebrates most often seen, are juvenile Abalone, Biscuit Stars, Triton Shells and Chitons.

The water is nearly always very clear, so if you have an underwater camera, and you are a snorkeler, this is your spot to dive.

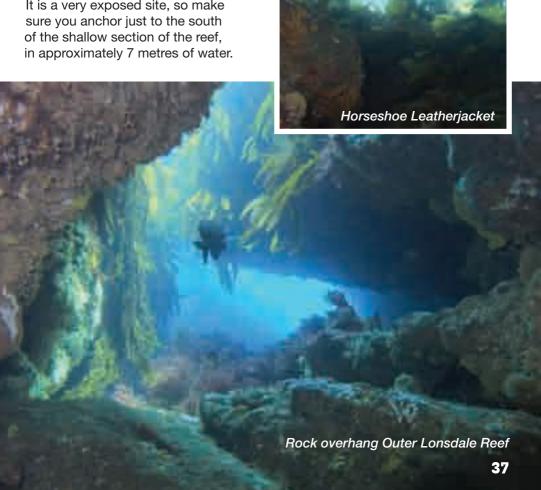
Underwater garden

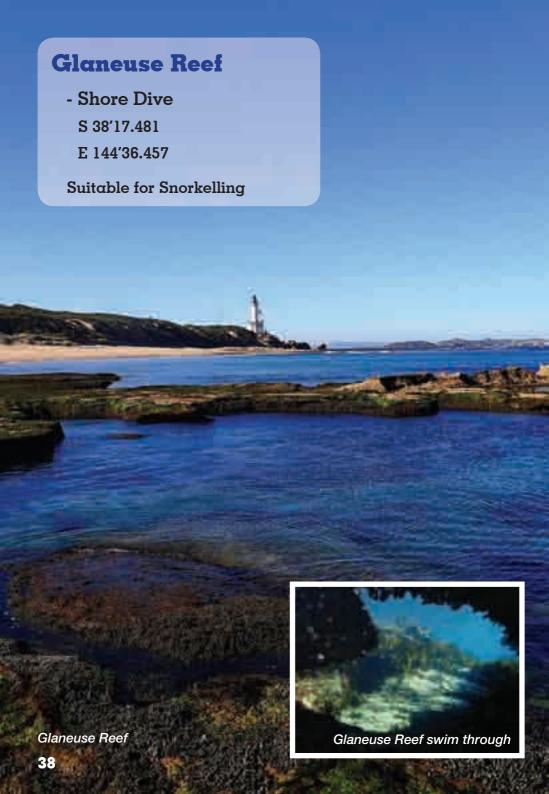




his a large area of shallow reef that lies off the extreme S.E. tip of the Outer Lonsdale Reef. It is a very exposed site, but offers the diver with limited experience a wide variety of reef habitats that are not usually experienced in such shallow water. It is dominated by a huge over-hang that runs along its southern side, and is full of a wide variety of fish and invertebrate species, that offers much for the inquisitive diver. Many pelagic fish species often hang around this drop-off whilst the ebb is running, so be prepared for what can be an exhilarating dive experience. It is a very exposed site, so make sure you anchor just to the south of the shallow section of the reef,

It is an ebb tide dive, so under no circumstances are you to dive when it is a flood tide, as not only are the currents very strong, but the swell can increase with very little warning.





The Glaneuse Reef is situated at the western extremity of the Point Lonsdale section of the Port Phillip Heads Marine National Park. It can be accessed from either walking over the dune from the track at Ocean Road (opposite Winterly Road), or slightly longer by walking westwood along the back beach from the lighthouse.

The reef is named after the barque *Glaneuse* that ran ashore on it's western side on 2nd October 1886. It was heavily salvaged at the time and it is rarely seen due to the movement of sand over its remains. The reef itself is a drying reef that becomes exposed during the ebb tide. Once the water has receded a series of shallow rock pools are exposed, that are great for the beginner snorkeler. The pools themselves can become filled up with sand from time to time, but then

exposed again after big seas. The diver can see a wide variety of marine vegetation that is both resilient and colourful. Lots of juvenile fish such as Blue-throat wrasse, Sea Sweep and Luderick can be seen under the rocky reef over-hangs. Marine invertebrates including shrimp, sea stars and shellfish can be found hiding among the kelp.

When the tide starts to flood (come in), it is best to leave the water as the swell usually increases with the rising tide.

Coral and sponge encrusted reef





- Boat Dive

S 38'16.6021

E 144'41.857

Suitable for Snorkelling, Open Water & Advanced Divers



This is one of the first fully protected Marine Parks to be established in Australia. But its history goes back more than a century to the early years of Victorian settlement. In the 1870's work began on Popes Eye as a defence structure to help protect Melbourne from perceived naval threats of the day. It was never completed and lay abandoned never to serve any meaningful defence purpose.

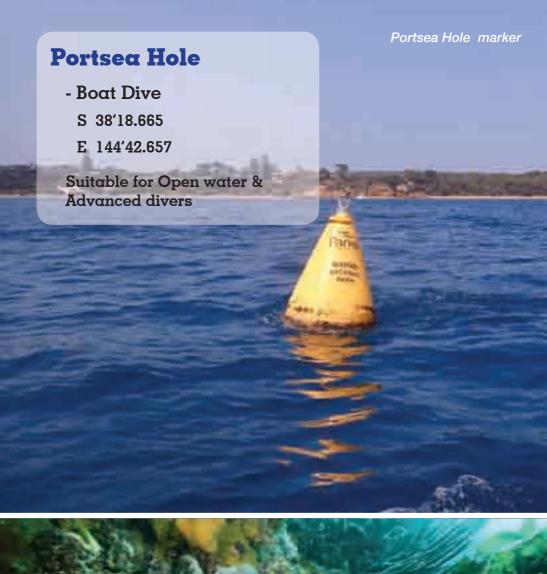
Over the years it became a recreational destination for fishermen and in later years divers, who would visit the site from time to time. All this was to change in 1979 when the Popes Eye was established as the Harold Holt Fisheries Reserve, which gave the resident marine life protection from exploitation by fishermen and boat operators.

Popes Eye (annulus) structure is under 100m. in diameter and is open

to the north for about a third of its circumference which allows shallow draft vessels to enter and anchor in safety. The depth of water to the south is around 9m. but to the north has shallowed off recently, due to extensive sand movements.

For the diver there is good snorkelling to be had within the structure, but more experience is necessary when diving on the outside of it. Tides play an important part for all divers both scuba & snorkelling. If it is ebb the best and easiest diving will be had at the southern aspect of the structure but if it is flood tide, the reverse applies and the northern half of the structure will be the most easily dived. The best visibility for a dive is usually at the end of the flood tide when all the clear water that has been drawn in through the heads can on occasions give you spectacular visibility.







The Portsea Hole lies approximately one kilometre to the N.W. of the Portsea Pier and is marked by four lit yellow special mark buoys at each of its corners. It is a small area covering only 10 hectares. To get to it you need a boat, either get a charter boat to take you there or launch your own boat at either Sorrento boat ramp to the east or the Queenscliff boat ramp further to the N.W. It is imperative that you know the state of the tides to make this both a successful and safe diving experience.

The Portsea Hole is an unusual dive site as it doesn't stand proud as a reef system, but rather is a sunken remnant of the Yarra River amid a vast sand plain. This is a site that is a result of both geomorphology as well as strong tidal effects.

This dive is strictly a slack water dive from a boat, as when the tide strengthens again ascent is made all the more difficult. It is a dive for the more experienced diver who has had sound experience diving in tidal situations. The hole itself has depths ranging from 12 to 32 m. The reef that is the main feature of the dive is covered in a rich benthic community with sponges, soft corals, and other more sedentary invertebrates.

Drop off - Portsea Hole



