



NATIONAL PARKS ASSOCIATION OF NSW  
protecting nature through community action

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NEWSLETTER NATIONAL PARKS ASSOCIATION OF NSW INC  
Spring edition 123  
**SOUTHERN SYDNEY BRANCH**

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### In This Issue: A SPECIAL MARINE EDITION

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- The Marine Natural Values of Botany Bay
- Urangan Pier, Hervey Bay

**BUSINESS MEETINGS** All are welcome to attend, have your say and hear what's happening in the NPA. Contact Peter on 95287341 or Gary on 95701813 for details. These meetings are now held on either the 1st or 2nd Wednesdays of the month, except when this coincides with school holidays

**BRANCH MEETINGS:** Come and meet other members from your local area, new members and friends are most welcome. These meetings are organised for you, are informal, informative and relaxing. An interesting evening is guaranteed and supper is provided. The venue for Branch meetings is the Multi-Purpose Centre, 123 Flora St Sutherland (near Belmont St) 3 minutes' walk from the railway station and with plenty of parking. All meetings commence at 8.00pm.

**The next meeting is 26 Sept "People power in the Powerful Owl Project"** The Powerful Owl Project is a citizen science project that provides a conduit for the community to learn about and get involved with owl and habitat conservation actions in the urban environments. Project Officer Beth Mott will share what we have learned about urban Powerful Owls in the last seven years, and what we can do to help keep them in our urban environments.

## Editorial

“Oceans are the lifeblood of planet Earth and humankind. They flow over nearly three-quarters of our planet, and hold 97% of the planet's water. They produce more than half of the oxygen in the atmosphere, and absorb the most carbon from it.

No matter how far from the shore that you live, oceans still affect your life and the lives of your families and friends, classmates and colleagues. The air that you breathe, the water you drink, the food you eat, the products that keep you warm, safe, informed, and entertained — all can come from or be transported by the ocean.

About half of the world's population lives within the coastal zone, and ocean-based businesses contribute more than \$500 billion to the world's economy. Historically, we thought that we could never take too much out of, or put too much waste into, the oceans.

The sheer number of people who use and depend on the ocean, and the sometimes unwise practices we adopt, have created problems such as overharvest of resources, reduction in biodiversity, and degradation of marine habitats and species, among others. We risk the very ecosystems on which our survival depends.”<sup>1</sup>

Those words from Protect Planet Ocean says it all and explains why NPA is as concerned about marine protection as it is with terrestrial protection. It is also why the Southern Sydney Branch of NPA has decided to dedicate an entire edition to marine protection.

NPA believes that there should not just be marine protected areas but that there should be marine national parks. Reserves need to be chosen based on Comprehensiveness, Adequacy and Representativeness criteria on a Bioregion-wide basis. Threatened or uncommon species will only survive if sufficient samples of their habitat are conserved using these CAR criteria as a basis for selection.

We hope you enjoy this special edition – Brian Everingham (editor)



Picture: Mike Scotland

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<sup>1</sup> <http://www.protectplanet ocean.org/collections/introduction/introbox/oceans/introduction-item.html>

## Our Branch

The NPA offers members over 1000 free midweek and weekend activities a year including bush walks, canoe trips, bike rides, biodiversity surveys, bird watching, and family trips. Activities cater for all levels of fitness. Easy/short walks, day bushwalks, overnight bushwalks, week bushwalks, educational walks.

### Walks/Activities

Date	Day	Walk	Grade
26/8	Sunday	Glenbrook – Red Hands Cave Circuit	3
1/9	Saturday	Six Foot Track to Cox's River	3
15/9	Saturday	Braeside Walk – Grand Canyon	3
18/9	Tuesday	Photographic Walk: Wattamolla to Little Marley	3
26/9 at 8.00pm	Wednesday	Talk on Powerful Owls	1
29/9	Saturday	Golden Stairs to Ruined Castle	3
2/10	Tuesday	Morning Photographic Walk: Mount Westmacott	2
17/10	Wednesday	Charles Darwin Walk Wentworth Falls	2
10/11	Saturday	Otford to Otford via Burning Palms	3
24/11	Saturday	Lockley's Pylon	2
28/11	Wednesday	Morning Photographic walk: Bundeena and surrounds	2
28/11 at 8.00pm	Wednesday	Talk on RiverKeepers .... Come and hear about the protection of the Georges River	

Special screening of the film Blue on Wed. 12 September 2018, 6:00 pm – 8:15 pm AEST at GU Film House Cronulla, 2-6 Cronulla Street, Cronulla, NSW 2230

BLUE is an Australian film about how the oceans are broken, and what can be done to fix them. Half of all marine life has been lost in the last 40 years. And by 2050 there will be more plastic in the sea than fish. Featuring passionate advocates for ocean preservation, the film tackles themes of habitat destruction, species loss and pollution. Filmed in the seas surrounding Australia, Indonesia, the Philippines and the USA, BLUE looks at how the very nature of the ocean is being altered. Our ocean has been the guardian of life on earth. Now it is our turn to be guardians for the ocean.

**Speakers include** Eleni Petinos - Member for Miranda, Sharnie Connell - Sydney Marine Park Campaigner and Lucas Handley - Ocean Guardian featured in the film  
Get your tickets at <https://www.eventbrite.com.au/e/blue-the-film-tickets-48400358776>

## The Seabed

Did you know that there is a body known as the International Seabed Authority<sup>2</sup>? The International Seabed Authority is an autonomous international organization established under the 1982 United Nations Convention on the Law of the Sea and the 1994 Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea. The Authority is the organization through which States Parties to the Convention shall, in accordance with the regime for the seabed and ocean floor and subsoil thereof beyond the limits of national jurisdiction (the Area) established in Part XI and the Agreement, organize and control activities in the Area, particularly with a view to administering the resources of the Area. That translates as resource extraction and its regulation and therefore it is of crucial importance for anyone interested in marine conservation and the ecological health of our planet.

And yet its work goes unnoticed. For example, did anyone notice any reference to the meeting that was held in Jamaica, June 16-27<sup>th</sup>, 2018? This is the 24<sup>th</sup> session of the ISA and it operated over two blocks of time. The first was from March 5-9<sup>th</sup> 2018. You can download the

What concerned me when I looked at the agenda was a lack of focus on environmental principles. I might be wrong but a cursory look at the agenda and the reports from the meetings showed that the focus was on how to regulate resource extraction and share in the financial benefits.

During the 5-day meeting, the Council considered the report of the Secretary-General on the status of national legislation relating to deep seabed mining; the report of the Chair of the Legal and Technical Commission on the work of the Commission at its sessions; the Report of the Finance Committee; the report of the Secretary-General on the election of members of the Legal and Technical Commission; and make recommendations to the Assembly on the 2019-2020 proposed budget of the Authority.

Much of the Council meeting, however, was devoted to the consideration of the revised draft regulations on exploitation of mineral resources in the Area together with providing the Commission further direction, guidance or comments on the structure of the draft regulations; the balance of rights and obligations; the balance between certainty and predictability; as well as flexibility and adaptability.

Australia was present. It is therefore vitally important to know what position Australia takes at these meetings and whether our government advocates the precautionary principle when it comes to resource extraction<sup>3</sup>. It's been a long time in development.<sup>4</sup>

We will keep you posted!

Brian Everingham [brian.everingham@gmail.com](mailto:brian.everingham@gmail.com)

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<sup>2</sup> <https://www.isa.org.jm/>

<sup>3</sup> Aline Jaeckel. The International Seabed Authority and the Precautionary Principle Balancing Deep Seabed Mineral Mining and Marine Environmental Protection, 2017

<sup>4</sup> See <https://www.isa.org.jm/legal-instruments/ongoing-development-regulations-exploitation-mineral-resources-area>

## Sydney's marine ecosystem

**Mike Scotland**

Sydney is one of the very rare major cities in the entire world where we can find incredible marine life with a few hundred metres of houses. You can jump in the ocean at Cronulla or Maroubra and see wonderful life forms. We are truly blessed with rich and diverse marine life.

Recently, I saw three female Spotted Wobbegong's inside Botany Bay. We also have three of the spectacular Smooth Short Tail Stingray that regularly cruise past divers. One large female passed me within half a metre a few weeks ago. She was relaxed and, I think, curious about what I was doing. They are majestic creatures. In fact, it is officially the world's largest Stingray, *Bathyrajash brevicaudatum*.



Last year, I documented eight species of Leatherjackets that are resident at Botany Bay. Southern Australia is a world hotspot for these fish, having about half of the world's species. The same applies to Weedy Sea Dragons, Sea Horses and Pipe fish. We have more than 110 species of the 220 Syngnathids across the entire planet. Syngnathids refers to the fused jaw of Sea Horses that is like a tube mouth with no teeth.

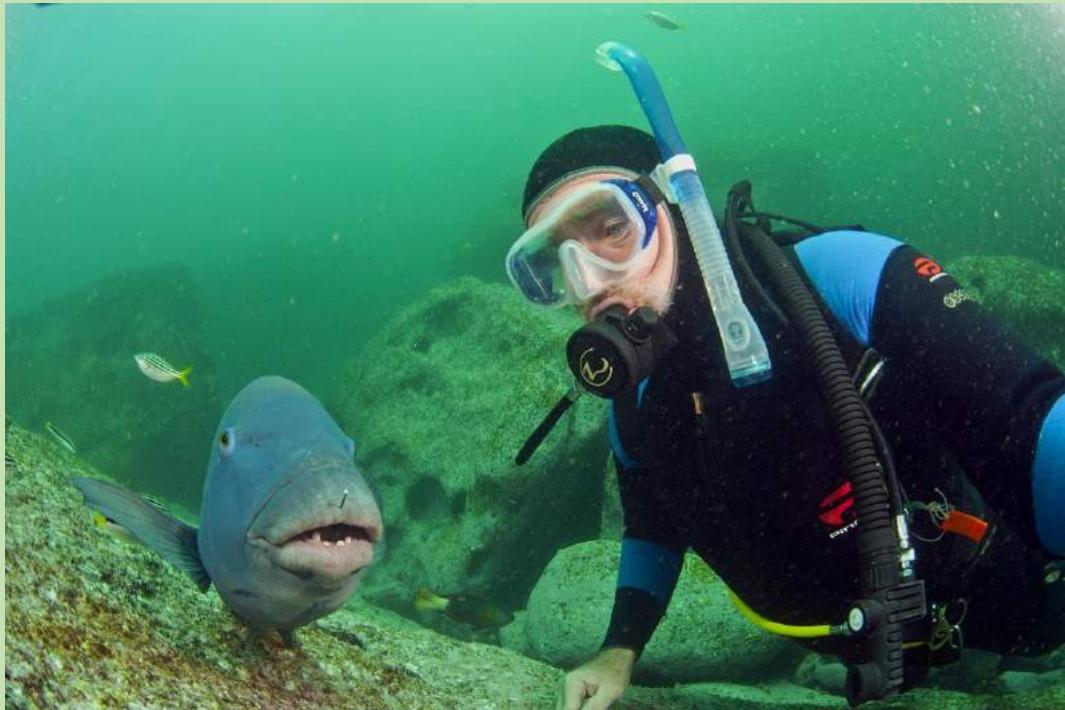




I could go on. We have an incredible bio-diversity of Sea Stars, Sea Shells, Cephalopods and lots more. *Sepia apama* is the world's largest Cuttlefish and can be found metres from the shore. Suffice to say, Sydney's marine life is unique and, in its own special way, very beautiful. The Weedy Sea Dragon is an iconic life form, every bit as important to divers as Koalas to all.

However, we have a lot of two legged predators. These highly optimistic carnivores are fulfilling their manly obligation to hunt and provide food for the table. This is a very noble past time!

However, the ocean ecosystem has its own higher order carnivores such as Kingfish and Grey Nurse sharks, Dolphins, Moray Eels and even Great Whites.



The question arises: Is there room for all of the hordes of half a million, determined fishers to remove more food from the ecosystem? Bearing in mind that many fish take five to seven years

to mature to a breeding age, one extremely successful human predator can take a few fish from a reef and go home feeling very satisfied with himself. However, the next few years, every diver who sees this reef will see a reef deprived on this fish, a severely depleted ecosystem. That is, until the juveniles can mature and begin to breed. This takes years!

That is the state of most of the marine reefs around Sydney,

They are ALL overfished to the point of environmental degradation. I would go as far as to describe it as environmental vandalism. I dive Sydney's reefs more than one hundred times a year. I can tell you that the numbers of all species of fish are extremely low. The marine ecosystem is a fairly lonely place where the wildlife is in retreat and Mother Nature is very much on the run. When there are half a million human predators as well as the natural predators, fish simply do not have a chance!

What is the solution? We need to spend the money from fishing licences to create a lot more fisheries research areas and breed sport fish to replenish the sea with Bream Snapper and Jewfish. Then, we need Marine Parks where fish can breed. All overseas studies show that fish populations recover quickly and spill over to adjacent marine areas means that fishers can catch fish. The system works!

Put simply. There are not enough fish in the sea for half a million fishers to catch off Sydney's waters. I joke that there are seven hundred thousand fishers, seventy thousand fish and each fish take seven years to reach maturity. It probably means that fishers take home a catch in one in seven outings. They are simply enjoying a day out in the fresh air, getting some exercise and enjoying the view.

One popular reef fish is the Red Morwong. Every adult at Kamay National Park has been taken except for one or two who have learned NOT to eat the free food delivered by those nasty shining hooks. Some Morwongs have learned to sneak deep inside a crevice between the large boulders as they know that spearfishers swim fast and cannot stay down too long.

As a point of interest, these same fish recognise that slow moving divers are not a threat and behave normally right in front of us. Fish are not dumb animals. A fish with a few smarts can survive.

The marine life off Sydney is in dire need of protection. I wish I could protect it yesterday. The slaughter cannot continue. After all, the old American Indian saying rings true. When the last living thing has been killed, the world will be a very lonely place for mankind.

All pictures by Mike Scotland

## A Marine Park for Sydney

The Southern Sydney Branch of National Parks Association of NSW was the first conservation group to advocate for a Marine Park within the greater Sydney region way back in 1994. Drawing on some concepts created by Dr Ted Bryant of Wollongong University, our Branch advocated a Curracurrong Marine Protected Area before the Marine Parks Act (1997) and the current governments Marine Estate Management Act (2014) became law. The driving force was the imminent threat of Boral mining for sand offshore from Royal National Park. The government withdrew the planned public Commission of Inquiry before it began once it saw the scale of community opposition to compromising the oceanic environment adjoining Australia's first National Park.

It was ironically the state Labor Government, which has now promised, if elected, to create a Sydney Marine Park located in the so-called Hawkesbury Shelf Marine Bioregion (between South Stockton Beach and Shellharbour) that placed a halt on processes which had created (under different governments) five other multiple-use Marine Parks along NSW's coastline. The Labor Government at the time quoted the existence of an existing network of aquatic reserves around Sydney, but as these accounted for less than 1% of state marine waters in the region it is more likely that the government was running scared on the complexities that might arise from creating a marine park in the most populated part of the state. Several independent surveys tell us that marine parks with fully protected sanctuaries are now well accepted as a concept to give fish and other marine creatures a future. The Greens are also fully on side with a future Sydney Marine Park. But where does the Liberal Party stand?

We know that Mark Speakman, now the state's Attorney General and state member for Cronulla, has explicitly supported a Sydney Marine Park, with boundaries and extent of sanctuaries determined only after a process of community engagement. NPA also agrees that this process is necessary. A few other MP's including member for Oatley's Mark Coure have been willing to publicly announce their support. Mark Coure was happy to appear on Southern Sydney Branch's Facebook page brandishing a placard supporting a Sydney Marine Park. Your branch and NPA Head office will continue to engage with local politicians and key ministers to garner the degree of political support needed to at least raise the current government's thinking to a level where the concept of a marine park for Sydney will be advanced to a stage of detailed engagement with the public.

Our worst fear expressed to senior Government Bureaucrats is that the Government will be the tail that wags the dog dictating that a new Sydney Marine Park will only be countenanced if other management options dictate that existing threats in the region cannot be addressed by any other means. If this proviso gets embedded in the State's Marine Policy due for released later in 2018, I doubt that any commitment will be made by the NSW Liberal Party before next year's election, if at all. Your branch has argued in many forums that attending to the extensive scientific literature that enunciates the many values of well-designed and managed marine sanctuaries with strong enforcement and community support, will start to reap biodiversity benefits, given time, as has happened throughout the world. Additionally, there is accumulating evidence that sanctuaries can add to the resilience of marine ecosystems, helping to counter cumulative impact of many negative consequences of threats such as climate change and oceanic pollution. Though, anti-

pollution measures, habitat restoration and adequate fisheries management both commercial and recreational, all have a role to play in addressing threats. The Government's "new" approach to whole of ocean management in a threat and risk framework should not be an excuse to dismiss a tried approach to improving oceanic and estuarine biodiversity.

NPA is working creatively with Nature Conservation Council, Australian Marine Conservation Societies, several universities, Underwater Research Group and many community-based groups to advance our arguments for a Sydney Marine Park, ready for a hopeful government announcement of its intent to fill in the gap of marine protection in this central part of the NSW coast. We are thrilled by the knowledge that many groups are out there advocating for protections in their special parts of the coast. Please read the inspiring story of The Shelly (Beach) Ocean Swimmers (SOS) (in this newsletter) that are not only documenting the impressive biodiversity of the Cronulla and Port Hacking areas, but are making big contributions to the overall campaign. "Illawarra Birders" group has accumulated a vast treasury of migratory bird data that is informing proposals for some lake-fringing sanctuaries in an increasingly threatened Lake Illawarra. Local people at the Long Reef Rock Platform have seen the oceanic life fall away due to overfishing and marine fauna collecting in this hopelessly inadequate "Aquatic Reserve". WE know from accumulating, unpublished data from University of NSW that the social use of many of our marine areas extends far beyond what fishers do. In many cases, swimmers, snorkelers and scuba divers far outweigh in numbers those who fish...so strident calls to manage oceans just for fishing need to be balanced by those people who wish to see what a healthy marine ecosystem looks like. Just ask any diver, snorkeler or masked member of the "Bold and Beautiful" ocean swimmers why they keep coming back to Shelly Beach, Manly, a priceless, bountiful bay, and you will start to understand why there needs to be more places that rank marine biodiversity improvements ahead of resource extractive activities and you will understand.

Or just put your head under the water at your favourite marine place in Sydney, and as famous author Tim Winton recalled as a boy, a whole new world opened up to him, and so it will to you.

Gary Schoer [ssbnpansw@bigpond.com](mailto:ssbnpansw@bigpond.com)

Waters off Kamay Botany Bay National Park



**SOS**  
**SHELLY OCEAN SWIMMERS**  
**SWIMMING AND RECORDING MARINE SPECIES**

**Our passion for the ocean**

Shelly Ocean Swimmers (SOS) are a group of swimmers and snorkellers who meet at 8am every morning at Shelly Beach Cronulla, to enjoy exercise, marine life and camaraderie in the ocean: sharing a love of the sea and also a desire to record our marine discoveries through photography. We have a You Tube Channel named Shelly Ocean Swimmers where we upload videos of each day's observations.



**SOS on Shark Island**

As we swim nearly every day throughout the year, this channel is an excellent record of seasonal changes: in summer we are lucky enough to find tropical species such as Moorish Idols but in winter we notice they disappear and we find ourselves focusing on beautiful luminescent seaweeds and Port Jackson Sharks. In May we are thrilled to find juvenile, non-aggressive Dusky Whalers return to our Shelly shores. The Marine Sanctuary at Cabbage Tree Bay, Manly also is a seasonal home to these beautiful sharks. Marine sanctuaries are important in providing habitat for a wide variety of marine creatures great and small. Shelly Ocean

Swimmers enjoy recording not just the larger species but also the tiniest crab waving its nippers or soft coral polyps feeding.

**SOS You Tube Video of Dusky Whaler Sharks:**

[https://www.youtube.com/edit?o=U&video\\_id=0qN3VjNDyyg](https://www.youtube.com/edit?o=U&video_id=0qN3VjNDyyg)



**Seaweed at Cronulla (*Lobophora variegata*)**

## Where we swim

Usually we swim in the ocean towards Glaisher Point to the south or towards Cronulla Point and Shark Island to the north. If the seas are flat we swim right around Shark Island where we observe Port Jackson Sharks, Green Turtles, Dusky Whalers, Eastern Blue Groper and huge schools of fish. Rough seas help us to expand our swims to venture into Gunnamatta Bay at Darook Park, Jibbon Beach, Hungry Point or Bell Place where we have observed some amazing species such as Wobbegong sharks with their young, beautiful Swimming Anemones and Waratah Anemones. Shelly Pool also provides an amazing diversity of species to observe if the seas are rough.



**Swimming Anemone** (*Boloceroides mcmurrichi*)

Video: <https://www.youtube.com/watch?v=JexnvKhb48E&t=1s>

The colours of the marine life are brilliant at Cronulla due to the excellent water clarity. An artist's abstract delight is the pink Ladder Ascidian in Gunnamatta Bay and sometimes we even see Australian Giant Cuttlefish at Shark Island or Jibbon Head. There is always something to see. (our unofficial motto!)



**Australian Giant Cuttlefish**  
(*Sepia apama*)



**Ladder Ascidian**  
(*Botrylloides leachii*)

## Recording our Observations using Inaturalist

In the past year we have been working to share our observations publicly via the *Inaturalist Citizen*

*Science Online Project*. This is a social and scientific network of biologists and naturalists. Members photograph, record and map the exact location of observations and help each other identify organisms. So far we have as a group, recorded 437 different species and have over 2,414 general observations. When one of us records a new species we are very excited and rush home to record this on our Inaturalist profile. This has a twofold purpose: we are learning about new species each day and also helping to compile a scientific record that could be used for Marine Park proposals.

### **Shelly Ocean Swimmers Marine Biodiversity Project on Inaturalist.**

<https://www.inaturalist.org/projects/shelly-ocean-swimmers-marine-biodiversity-project>

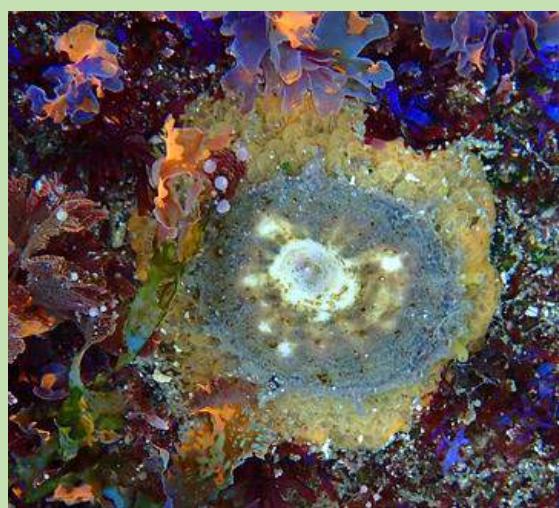
### **Swimming fast and light**

Our swims take us through the surf zone and so we need to have our hands free to navigate rips, waves, channels and rocks. Therefore, our style of swimming necessitates fast and lightweight photography. Our videos might be a little jumpy and our pictures fuzzy at times, but sometimes we are lucky enough to capture some amazing photographs and videos.

One day at Jibbon Beach, we even swam close to a dolphin: he came back three times to look at us and smile!! This event was possibly a once in a lifetime experience and capturing the moment though video, demonstrates the excitement and pure joy of sharing the ocean with a swimming group and celebrating a love of the ocean and the amazing life it sustains.

**Swimming with Dolphins Video:** <https://www.youtube.com/watch?v=-10-j6fOLS4>

We cannot take out large camera rigs as these are too heavy to take on a 2km swim around Shark island or near rocky shores or shallow seagrass beds. Therefore we use a Gopro, Olympus TG4/5 or Olympus TG Tracker to record our species. Cameras are secured in carpenters' chisel holders or camera bags on a dive belt allowing us to use our arms to swim through the surf zone out to the deeper water. Divers tend to record species in deeper water and so we feel that our records are helpful in recording an area that is sometimes minimally recorded.



**Umbrella Slug ( Umbraculum umbraculum)**

### **Recreational Usage of the Cronulla area**

During our swims we share the ocean with a wide variety of people. Around Shark Island we meet body boarders, paddle boarders, divers, canoeists, outriggers, surfers, sailboard riders, and a huge numbers of ocean swimmers.

On the shore we meet casual swimmers and on rare occasions we meet spear fishers and fishers on the rocky shores as other recreational users far outnumber the fishers who tend to go to more remote locations to fish. Unfortunately in one area at Salmon Haul Cronulla, we sometimes meet people illegally spearfishing and we use this opportunity to educate people about the reasons why we have areas set aside as marine sanctuaries. For example at Darook Park there are large areas of seagrasses. These seagrass areas are protected, but sadly we see boats anchoring and fishing in grass and this causes large gouges in grass beds -that may never recover. It is our view that these seagrass areas need a higher level of protection to conserve this special nursery area. We have observed Wobbegong sharks with newborn babies here and if these threatened communities of seagrasses are not given a higher level of protection, marine biodiversity may decrease.

### **A Marine Park for Sydney**

A Marine Park for Sydney will help in identifying areas where multiple recreational activities can occur. It will set aside areas for sanctuaries while still allowing fishing in certain areas and in this way our ocean shores are available for all to share and enjoy.

Shelly Ocean Swimmers have made a delegation to our local Member, Mark Speakman in order to show our support for expanding marine sanctuaries in our local area. We are particularly keen to have a Sanctuary around Shark Island, Darook/Salmon Haul, Jibbon Beach/Headland and also to increase the area at Cabbage Tree Bay, Bonnie Vale, and at Shiprock in Burraneer Bay. Recently Gary Schoer (N.P.A. Marine Park campaigner who has been a major force in marine campaigning for many years) has further motivated us to join the “Marine Park for Sydney Working Group”, whose members are collaborating on a wider Sydney Marine Park Proposal.

<https://www.sydneymarinepark.org.au/>

We look forward to working with N.P.A. supporters to campaign for this Marine Park. We may even build a model of a huge Blue Groper to help with this campaign and if anyone is keen to support us, please contact our group. Feel free also to add your own Citizen Science observations of fish or seabirds at Cronulla, to our Inaturalist Project. We have observed Pied Oystercatchers In Gunnamatta Bay and we are looking for more observations of threatened species! We hope N.P.A members might be able to help us!

Pied Oystercatcher Observation on Inaturalist

<https://www.inaturalist.org/observations/12635369>

Video: Cormorant hunts in Wrasse's cave

[https://www.youtube.com/edit?o=U&video\\_id=KKGFxEm4MY8](https://www.youtube.com/edit?o=U&video_id=KKGFxEm4MY8)

Video: Cuttlefish

[https://www.youtube.com/edit?o=U&video\\_id=k6ijT4M\\_P5E](https://www.youtube.com/edit?o=U&video_id=k6ijT4M_P5E)

Pam Melrose (pmelrose@optusnet.com.au) (Member of NPA)

### **The Marine Natural Values of Botany Bay – John Turnbull**

Botany Bay is well known for its historic and terrestrial values. Perhaps less well known, but equally important, are its marine natural values. To the west of the bay, Town Point is a natural wetland area which provides important habitat for many marine species. In this article, however, I am going to focus on the eastern end of Botany Bay, where some of the most surprising animals can be found.

Both the north and south heads of Botany Bay, at La Perouse and Kurnell, are home to a wide diversity of marine life. Many are endemic to Australia, such as wobbegongs, leatherjackets, sponges and seaweeds. Threatened and rare species can also be found here, some of which live in this region and no-where else in the world.

Weedy seadragons are endemic to southern Australia. The Botany Bay population, which lives on both north and south heads of the bay, is at the northern-most extent of their range, and is the biggest population that we know of in Sydney. Scientists are concerned that this population may be in decline, and together with citizen scientists they are monitoring it closely.



The red-toed, or Bare Island anglerfish, was only described in 2014. It is only known to live in in this area and south to Jervis Bay, and the best information we have on this species is from Botany Bay. We don't know its status though; whether it's in trouble or not.



Sydney pygmy pipehorses have a similar story - local yet little-known. They are only the size of the tip of your pinkie, so can be very hard to find even when they're right under your nose.



Blue devil fish are a protected species which is threatened by aquarium collection, as it is a large colourful species. It's a favourite fish for SCUBA divers to see, as it hides under ledges and in the back of caves.



The pink soft coral, *Dendronephthya australis*, is only known from this region and is in the process of being listed as threatened. It suffers from poor water quality, anchor damage and entanglement. The biggest population we know of in Sydney is just inside the entrance to Botany Bay.



Botany Bay has several species of hard coral too, like this *Coscinaria mcneilli* at Bare Island. Members of the Underwater Research Group, who found it in the 1960s and have been monitoring it since, estimate it to be over 300 years old.



Botany Bay is popular with many users; swimmers, divers, snorkelers, fishers, walkers and paddlers. Despite being of immense natural and social value, the unique marine life at the entrance to Botany Bay has no local geographic protection. With good management, including well-placed sanctuary zones, we can preserve this diverse marine community for generations to come.

## Urangan Pier, Hervey Bay

By John Prats

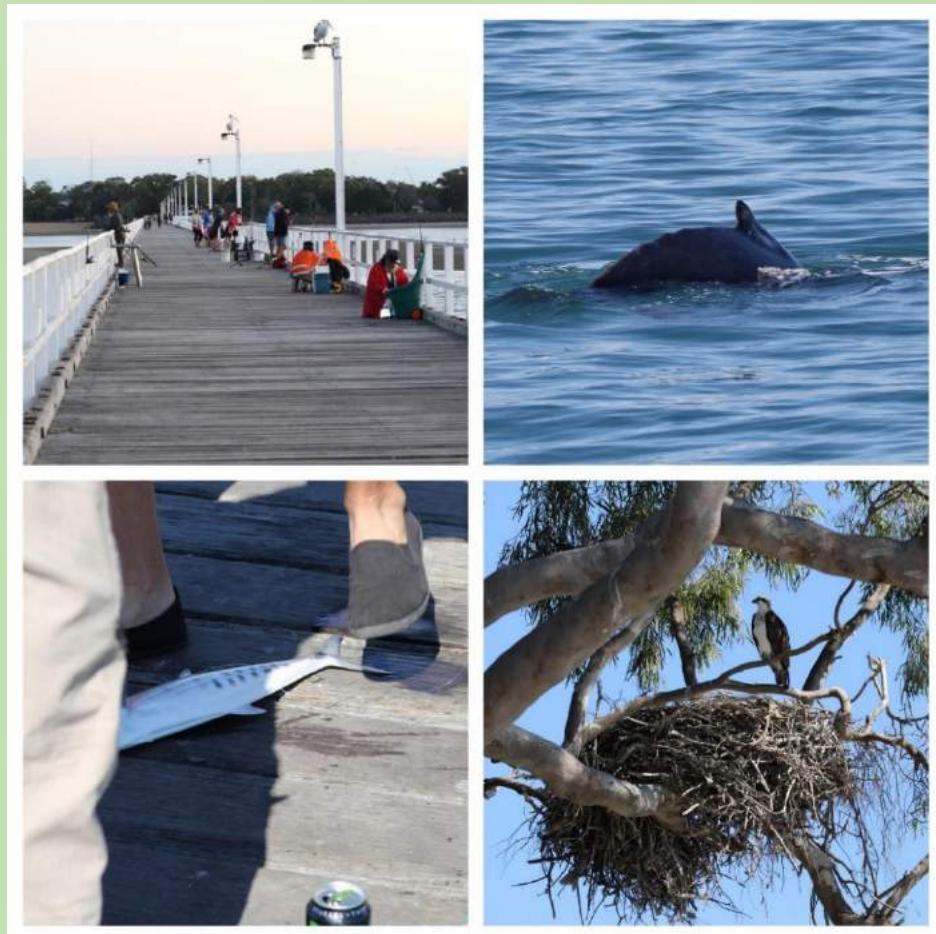
The Pier at Urangan in Hervey Bay, QLD, is within the Great Sandy Marine Park which covers most of the Wide Bay Area, i.e. the area between the mainland foreshore and Fraser Island. It was 1124m long when commissioned in 1917 to serve the export of produce from the hinterland. Later on it served as a coal terminal. It was decommissioned in 1985 and was due to be demolished but thankfully a "Save the Pier" campaign resulted in the last 880m being saved. In 1994 it was refurbished with the wooden piles replaced by corrosion protected steel ones. It celebrated its 100 year anniversary last year.



This winter we spent several days at a caravan park close to the Pier and I visited the area practically every day. Although the Pier is within the Great Sandy Marine Park, it is within a part of the park zoned "Conservation" which allows line fishing (with some restrictions) while prohibiting commercial netting, trawling and harvest fishing. This is in contrast to zones within the park which are termed "Marine National Park" ((see Marine Park Guide at:

<https://www.npsr.qld.gov.au/parks/great-sandy-marine/pdf/gsmp-vis-guide.pdf>). In Queensland, No take Sanctuaries are called Marine National Parks so that residents and visitors have a greater understanding that similar rules that apply in terrestrial national parks also apply to a large extent, in Marine National Parks. Here at Urangan Pier, fishing coexists with bird and whale watching, so to talk about how Marine National parks prevent people from “dropping a line”, as some do, is pure exaggeration.

The abundance of fish has made the area a popular fishing spot for both locals and visitors alike. Many visitors, myself included, just take a stroll to take photos and to see what's going on and what variety of fish are being caught. I have seen people land bream, flathead, whiting, tuna and school mackerel as well as those fish best avoided like: puffer fish. As an added attraction, this being the whale-watching season, we saw two whales swimming just 30m from the end of the pier!



Where there are fish, there are shore birds and, besides the terns, seagulls, boobies and swallows seen flying all over the place, at times white-bellied sea eagles and ospreys would turn up - no doubt attracted by abundant fish life as well as fish parts discarded by fishers. I was amazed at the number of osprey nests around the area. Like ships sunk to form artificial reefs, this pier is serving the same purpose, attracting a great variety of life.

We have been to Hervey Bay several times before mainly to visit Fraser Island and to watch whales during their northern migration. However, this time, being so close I concentrated on the pier and, like the other attractions of the area, it was well worth it.