



MARINE BIOLOGY PRIMARY AND SECONDARY TEACHER PD

10AM - 3PM

TUESDAY FEBRUARY 27TH, 2024

Learning will be FUN and ENGAGING. You can even SWIM WITH WHALES!

The ocean covers a staggering 361 million square kilometres of the planet, covering over 70% of the Earth's surface. It provides ecosystem services that feeds us, predicts and controls the climate, as well as protect marine and coastal habitat. **It is a rich classroom for science, climate change, biology, ecology, geography, history, culture, civics and citizenship, innovation and more.**

This Teacher PD, designed for both primary and secondary teachers, will look at the ecosystem services of the ocean, whilst drilling down into the specifics of the Ricketts Point Marine Sanctuary and share how we can provide essential hands-on discovery and field work experience **for all year levels from Foundation through to VCE Biology.**

Our goal is to give you a taste of all that Ricketts Point has to offer as a world class living, breathing outdoor classroom and the opportunity to partake in citizen science.

Ricketts Point and its marine waters possess a long history of biodiversity. From discoveries of prehistoric marine mammals and fish at nearby internationally renowned fossil sites, to the diversity of present-day marine species, Ricketts Point and its environs have long been recognized for the opportunity it provides for students to experience a rich natural history.

We will explore the intertidal rockpools, remnant coastal heath and banksia forest, discover birds of the bay, understand how to manage special places, share the cultural significance for the Bunurong, and show you where students gain practical experience in quadrat surveys, data collection and interpretation, and much more.

Welcome and Introduction.

10.00AM Official welcome, Acknowledgement of Country, plus introduction of Gould League and how we've inspired generations of scientists, problem solvers and eco warriors for over 100 years.

10.10AM **Overview of Marine Ecosystem Services** and introduction to Ricketts Point Marine Sanctuary and its rich biodiversity.

10.30AM **Explore the diverse habitats of Ricketts Point Marine Sanctuary and observe our curriculum-based activities - Part 1.** This session entails a gentle grade loop walk exploring Coastal Heathland, Banksia, Yellow Box and Manna gum, Sea Berry Salt bush, bracken fern, black wattle, she-oak. We discuss how to manage special places, and the concept of custodianship in terms of past and present-day land management. You will also partake in our Birds of the Bay activity, coastal classifications and a plastic pollution activity.

11.30AM **Morning Tea.**

11.45AM **Explore the diverse habitats of Ricketts Point Marine Sanctuary and observe our curriculum-based activities - Part 2.** This activity explores the rock platform. Be introduced to the habitat, how it is managed by Parks Vic, common species and activities we run.

LEARN MORE ABOUT GOULD LEAGUE www.gould.org.au or follow us on



12.15PM

Ocean Literacy. Discover the seven Essential Principles of this new UN Framework.

12.45PM

Lunch and time to swim with whales in our "SodaStream Oceans of our Future 3D Experience."

1.15PM

The GOOD the BAD and the UGLY of Plastics.

Plastics enable durable, long-lasting design and construction in homes, buildings, and infrastructure like bridges. Plastic packaging helps protect and preserve goods, while reducing weight in transportation, which saves fuel and reduces greenhouse gas emissions. But not all plastics are good and single use plastics in particular are causing major problems for our oceans with microplastics being consumed and ingested in our homes, work places, and in our food chains.

In this presentation, you will discover "The GOOD the BAD and the UGLY of Plastics" and how it's creating an INNOVATION REVOLUTION driving the CIRCULAR ECONOMY, and how 3D is helping to motivate our kids to clean up our oceans. What happens to the oceans in the future will depend on choices we make today. We will inspire you why we must stop plastic from getting into the oceans, what we can do with the plastic we remove from the oceans, and importantly the actions we can take to stop the use of single use plastics.

2.45PM

The art of developing activities tied to the curriculum and an exploration marine artifacts, microscopes and program props. We've been delivering environmental incursions and excursions for over 100 years. In this short session, learn what to expect from all our programs. This will also be the final chance to Swim with Whales in our Virtual Reality – Oceans of the Future Program.

3.00PM

End of program.

Meet the Speakers



Rebecca Ceveri

Bec has been involved in marine education and conservation for almost twenty years. She completed a Bachelor of Science with majors in Marine Biology and Environmental Science. She previously worked at Melbourne Aquarium as Interpretation Manager before joining Gould League as Sessional Educator. In her 10+ years of experience with Gould League she has been instrumental in delivering and writing our programs from Kinder through to VCE.

Bec thoroughly enjoys the opportunity to introduce students to Victoria's unique marine biodiversity and influence community behaviour to produce positive environmental change.



Hakan Dellal

has been a Gould League Educator since 2012. His previous experience includes consultancy for corporate social responsibility and was one of the founding members of the Marine Care Ricketts Point Inc. community group. Much of Hakan's passion has been devoted to public and schools education. He holds qualifications in conservation and land management as well as post graduate studies in marine science and management.

Hakan has worked continuously to strengthen Gould League's programs and loves creating innovative ways to interpret the environment. Nothing motivates him more than provoking curiosity and a sense of connection, in both children and adults, to the natural world.



Anne-Maree McInerney

Anne-Maree is Gould League's General Manager. She is a highly regarded international sustainability thought leader, educator and advisor. She is recognised as a top 100 Global SustainAbility Leader; was involved in establishing the global principles of "How to Communicate Sustainability"; was one of the first 150 people in the world to be trained by Former Vice-President Al Gore as a climate leader and so much more.

Anne-Maree's passion for sustainability resonates through her powerful and meaningful stories of change and transformation. She creatively shows us that sustainability is not just an aspiration, it's a practical reality that is sweeping our businesses, communities and governance systems – providing significant financial, environmental and social returns.

FOR FURTHER INFORMATION CONTACT bookings@gould.org.au / 0431107389

Special guest speaker



Harry Breidahl

Harry is legendary when it comes to marine education in Australia and has been actively involved in the education space since 1970. He worked as a writer at the Gould League between 1977 and 1984 and established the Tooradin Marine Life Centre in 1980. Harry then formed his own company, Nautilus, Education, where he worked as an author, exhibit designer and environmental education consultant. Between 1989 and 2014 he was also a teaching associate in the Education Faculty at Monash University. Although retired from formal employment, Harry is still actively engaged in promoting Ocean Literacy here in Australia and internationally and has received a number of local and international awards for his work in this field.

OCEAN LITERACY

The concept of Ocean Literacy was originally developed in the USA in 2002 as a response to the fact that ocean topics didn't fit neatly into science or cross-curriculum disciplines and were mostly ignored in formal K-12 education. As a result, Ocean Literacy is now defined as – “an understanding of the ocean’s influence on you and your influence on the ocean”. Further to this, an ocean-literate person:

- Understands the essential principles and fundamental concepts about the ocean;
- Can communicate about the ocean in a meaningful way; and
- Is able to make informed and responsible decisions regarding the ocean and its resources.

Although Ocean Literacy plus the seven Essential Principles and 45 Fundamental Concepts were first defined in the USA, Ocean Literacy has now been adopted internationally and has been linked to United Nations Sustainable Development Goal 14: Life Below Water. More recently, Ocean Literacy has been used as a framework to develop an educational component of the United Nations Decade of Ocean Science for Sustainable Development (2021 to 2030) and there is a growing movement to support school teachers aiming to include Ocean Literacy within their teaching programs here in Australia. Harry provides insights into this framework for Australian Teachers. We also explore the changing curriculum so we can best understand how to support you and your school.

Discover why teachers come to our PD days...

“10 out of 10. It was so interesting and inspiring - lots of new innovation in sustainability and a more positive approach to managing the environment compared to the EnviroScience Textbook!”

Karen Collard - Upper Yarra Secondary College

“10 out of 10! The PD was informative, inspiring, motivating, engaging and full of new thinking paradigms. Thank you! ”

Kate Newman - Rowville Primary School

“10 out of 10. The walk gave us a chance to connect to our environment and presentations gave me knowledge I had never even considered before. I highly recommend others attend Gould League PD days.”

Samatha Chia - Heany Park Primary School

“Great presentations - fun, inspiring, engaging - 10 out of 10. I highly recommend others attend.”

Annette Anderson - EASL Coordinator



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Happy Teachers = Happy Students

Let us show you how we provide hands on learning activities linked to the curriculum that MAKES LEARNING FUN including the use of Virtual Reality, so your students are not so disconnected from the world in which they live - as the more they are connected to the natural world, the more they they will fight to protect it!

We will also provide insight into the issues of Eco-Anxiety and how to address it in a material way .



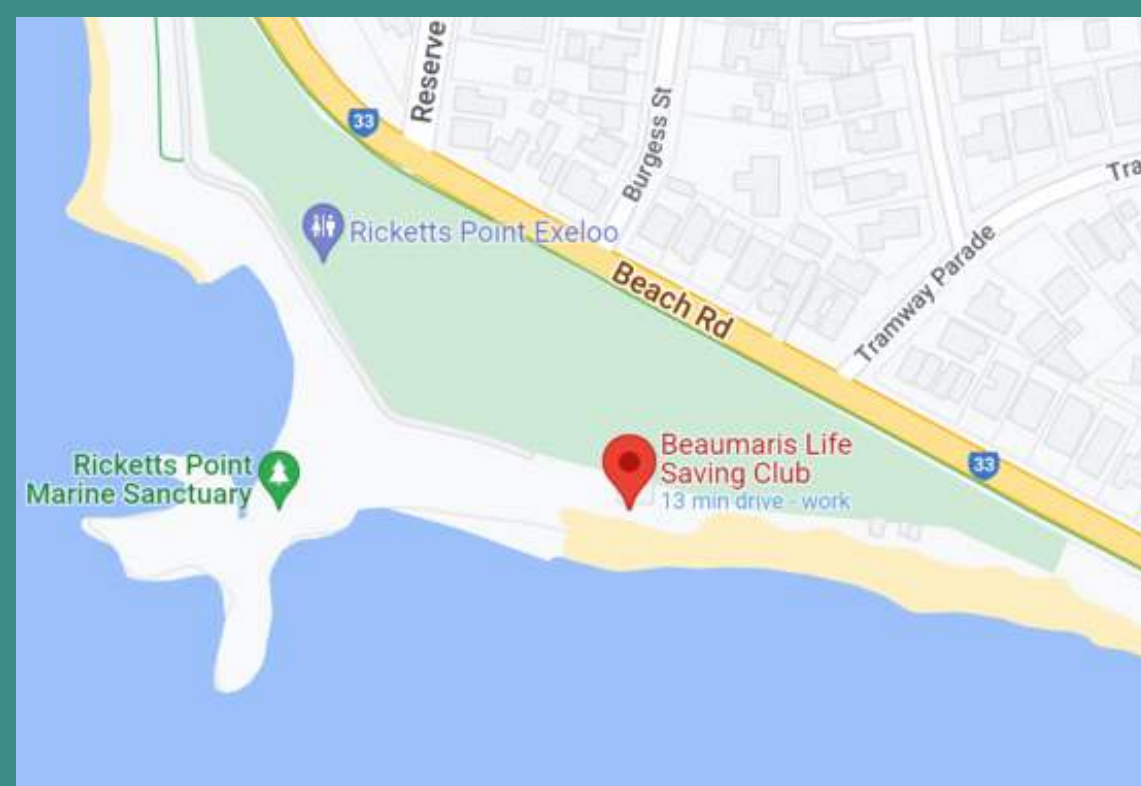
This learning program is best suited to educators of primary and secondary school students, school co-ordinators of incursions/ excursions, environmental science, VCE or leadership programs.

All attendees must be dressed suited for local weather conditions. We recommend comfortable walking shoes, water bottles, sunhats and sunscreen plus jackets as it can get quite windy and chilly on the rock platform.



FREE EVENT - INCLUDES LUNCH BOOKINGS *ESSENTIAL* DUE TO LIMITED PLACES

BOOK HERE
<https://www.eventbrite.com.au/e/gould-league-marine-biology-primary-and-secondary-teacher-pd-2024-tickets-767915946267?aff=oddtcreator>



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**WE LOOK FORWARD TO YOU
JOINING US TUESDAY 27TH FEBRUARY**

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