# THE COMMITTEE FOI



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## LORNE WARD EVENTS CALENDAR

#### November

17 Lorne Football & Netball Club AGM, Lorne Leisure Centre, Stribling Reserve at 10am



Early last week, a 'red tide' appeared... just for a single day. It streamed outward toward the pier from near the mouth of the Erskine River – a spreading river of pink – before the incoming tide fragmented it along the rocks of North Lorne. Aerial photographs, taken by Jonn Stewart, of this occasional natural phenomenon are – simply – stunningly beautiful.

Later that night, the waves, the Lorne foreshore, and the rocks of North Lorne glowed an eerie neon-electric blue ... the same soft, deep, iridescent blue light that now seems to outline so many of the roofs and spires atop the tallest city buildings in Melbourne.

As each wave would peak and break with a 'crack' in the dark, the churning, tumbling water would explode in a burst of neon blue. As bare feet trod the wetted sand at waters' edge, perfect footprints in iridescent blue and purple glowed and sparkled in the tracks left behind. This nighttime vision was perfectly captured by Leon Walker. This extraordinary event marked

another occasional 'visit' to our shores of a phytoplankton that, whilst common in our Southern Ocean, only occasionally blooms in such profusion that a 'red tide' by day, and 'blue nocturnal light-show' by night can be seen.

I have seen it a few times in my lifetime... I remember once in my childhood, once in my adolescence, and then, again, sometime in the late 1980's. My son, Nick, then 10 or 11, vividly recalls the joy, late into one warm summers' night, of splashing in the shallows in front of the Swing Bridge, of kicking showers of blue sparks into the night sky, and of doing 'twirlies' with his hand in an incandescent ocean. Fishermen will have seen it too, now and again, in the wake of their couta or cray boats. But ... once seen, never forgotten.

A range of sources describe the term as a 'red tide' ... a commonly used descriptor for a world-wide phenomenon that occurs when a ubiquitous species of ocean algae – 'dinoflagellates' – rapidly multiply into a pink or rust-colored 'bloom' in updrafts of deep-sea nutrients, or near river mouths following rainfall.

While some blooms can be harmful to other sea and/or bird life, they commonly dissipate as quickly as they form ... as this most recent Lorne 'bloom' appears to have done ... for it had gone, by the next day. B ut, persisting blooms have been known to cause toxicity to marine fish and bird life. Algal blooms are likely one of the more common reasons behind the intermittent mass 'die-offs' that are occasionally seen when – seemingly inexplicably – dead fish, birds, and other marine life can be found by the hundred and thousand, simultaneously washed up along our shores.

Dinoflagellates are small, microscopic single-cell members of the plankton family. In this case, the wee beastie was likely Noctiluca Scintillans Australis (https:// tinyurl.com/lorne-sea-glow). All have one spectacular, awe-inspiring capacity – it is called 'bioluminescence.'

Many plants and creatures express bioluminescence: fungi, fireflies, and glow-worms are well-known cases in point. Bioluminescence is caused when an enzyme called luciferase, chemically combines oxygen with a molecule – luciferin – that is found in some plants and animals. This produces a glowing chemical reaction, usually green, blue or purple ... the same principle as the snap and glow sticks used for emergency lighting, for camping, or for party wrist bands and necklaces.

In nature, some species 'glow' when disturbed, or agitated – like Noctiluca scintillans does in a disturbed ocean, or when trodden underfoot in damp sand at the shore. Others use it as a means of attracting prey – like the glowworms deep in our Otway bush. Still others 'glow' when frightened, or in fear of attack – as a warning: 'leave me alone, I am dangerous'.

One thing is certain ... while glowworms in the bush are magical, the sight of bioluminescence along a shoreline, or of neon blue foot-tracks in wet sand at night, are magical memories that will last a lifetime.

**John Agar** Lorne

### COMMITTEE FOR LORNE

Over the past month our amazing environment has delivered a number of spectacular sights and many were captured through the lenses of Lorne's dynamic trio of the photographers in Leon Walker, Ian Walding and Jonn Stewart allowing many to experience what we otherwise may not have. The electrical storms and rainbows have been brighter than ever but it was the red algae on the ocean that had the town talking. This amazing site, that all changed as darkness fell, had many searching for answers as to what they had seen.

I was intrigued to learn from someone far more knowledgeable than myself that

what I saw as a an algae during the day and a sparkling neon at night was in fact the vibrant glow or bioluminescence of an extravaganza of nature caused by the Noctiluca scintillans.

Neither an animal nor a plant, Noctiluca scintillans is a dinoflagellate; a single celled blob barely visible to the naked eye, with a sticky tentacle that's used to snare other plankton, fish eggs and larvae. At night, it is a different story. Some scientists speculate that Noctiluca flashes to startle or scare away predators, though there is no definite answer to why they glow.

There are only a few locations around

the globe where people have been able to catch glimpses of this rare light show, and it's now very clear that Lorne is one of those very unique places, but then again, we all know that and for so many different reasons.

As we are well entrenched into the last quarter of the calendar year it's time again for the annual round of Annual General Meetings (AGM)s for all our local organisations and the next month is a busy one on the local calendar. The Lorne Country Club were the first to roll theirs out last Sunday and following on, we see the Lorne Football and Netball Club on November 17, at 10am at Stribling Reserve, the Lorne Aquatic and Angling Club conducting their AGM on Saturday December 1 at 5:30pm and the Committee for Lorne on December 13 at 5.30 pm at the Lorne Leisure Centre.

All these organisations play vital roles in our Community and a big congratulations to all the Committee volunteers who work so tirelessly on behalf of the members of the organisations. Well done!!!

#### lan Stewart

Chairman - Committee for Lorne