

# North Head Sanctuary Foundation

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### General Meeting - Sat 19 May at 2pm

Please join us at Bandicoot Heaven for our next meeting. Graham Owen from The Society for Insect Studies will be the guest speaker.

His talk - **ALL ABOUT INSECTS** - is about the insects in the Sydney basin and the changes due to fire, urbanisation and weather patterns and symbiotic relationships. His talk with be supported by photos and trays of insects.

The Society had a fantastic display at Manly Ocean Care Day so this promises to be an interesting talk.

#### **Education Centre – Bandicoot Heaven**

Our Education room is open every weekend, from 10am to 4pm in Building 20. Call in and see us for a chat or information.

# Blog from Cameron Radford Australian Wildlife Conservancy

Recent radio-tracking of long-nosed bandicoots has confirmed their usage of newly planted areas of ESBS species as well as regenerated ESBS around the disturbed areas of the Old School of Artillery and the Oval.

The bandicoots were observed using the woodchips as foraging habitat for terrestrial invertebrates and use the new plantings for immediate cover. Over time, the bandicoots may even use the newly planted and regenerated ESBS for nesting habitat when dense ground covers with mid-level shrubs are available.

### Get involved:

#### **Climate Watching on North Head**

ClimateWatch walks on North Head are planned for 6 May and 3 June. They start at 10am from the Harbour Trust's Visitor Centre.

Please wear enclosed shoes, a hat, insect repellent and sunscreen and bring water.

The walks are free but bookings are essential (numbers limited to 20 per walk). Contact Rachel Maitland at Earthwatch for more information and to register. Email: rmaitland@earthwatch.org.au or phone 02 8966 9800 or 0403 167 556.

ClimateWatch enables every Australian to be involved in collecting and recording data that will help shape the country's scientific response to climate change. North Head is a key ClimateWatch monitoring site and the Foundation is assisting the program here with promotion and guided walks.

### **Third Cemetery**

Jenny Wilson



In memory of Private W.C. Smart N.S.W.M.L.I. who died 20<sup>th</sup> May1901, aged 22 years. Erected by Officers & Men N.S.W. China Naval Contingent

Private RM Charles Walter Smart was in the Marine Light Infantry that was part of the China Contingent that returned home by the steamer Chingtu on 25 April 1901. "Home Sweet Home" the men were singing on the ship as it entered Sydney Harbour. The SS Chingtu was quarantined.

Charles Smart developed smallpox at the Quarantine Station on 11 May, and was isolated from his comrades. He died ten days later on 20 May 1901, aged 22 years. . He had been vaccinated on the Salamis on route to China and again after arrival home, but each time the operation was unsuccessful.

There were no more deaths, the last 92 men, members of the NSW and Victorian naval contingents to China, were released from quarantine at 9 o'clock 31 May 1901, and brought to town in a Government launch. On landing they were paid off and given their discharge certificates. His older brother, Sydney Melton Smart was also in the Marine Light Infantry.

### North Fort and Coffee

The Memorial Walk at North Fort has more information on the Naval Contingent to China in 1900-1901.

Have a coffee or something to eat at Bella Vista before or afterward. Bella Vista is now open, 8am to 5pm, for breakfast and lunch.

## What's that stuff on the water?

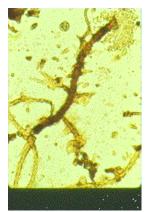


At numerous places on North Head, including the Hanging Swamp, walkers often find what appears to be oil floating on the water or apparently seeping out of the soil. It is easy, but wrong, to assume that this is some sort of pollution arising from oil spills in the days when the Army had fleets of vehicles trundling about. This impression is reinforced by the location of some seeps below the old petrol station opposite NHSF.

The "oil" is, however, a perfectly normal natural phenomenon caused by the presence of a bacterium *Leptothrix discophora* or a closely related species. These bacteria have the ability to concentrate iron and manganese from wet soil and to deposit it internally as small glittering crystals. These crystals are just the right size to diffract visible light and hence produce the "rainbow effect" which is mistaken for an oil sheen.

I have photographed a droplet of water containing these critters recently.





I sampled some of these bacteria and grown them in the lab. They look quite interesting under the microscope.

There is a large literature on this phenomenon... see for instance

## **Native Plant Nursery**

Due to wet weather our planting day was cancelled. If you would like to help with the plants by planting out or weeding, please contact Sue at shalmagy@bigpond.net.au.



Can you see who our visitor is in Bay 2?

## Cassytha species



Or *Devil's* twine is a leafless parasitic plant which scrambles/tangles over shrubs, in this case a Sheoak *Allocasuarina distyla*. It attaches to the host plant by means of suckers to extract water and nutrients.

#### Sanctuary Foundation aims:

The Sanctuary for biodiversity will honour the natural and cultural significance of North Head. It will be a safe place for flora, fauna and people, a living laboratory promoting the spiritual and biological value of Sydney Harbour. It will:

- Respect and honour the Indigenous significance of North Head;
- \* Build understanding of the natural and cultural values of North Head; and
- \* Promote integrated planning and management for the whole area, to ensure the highest level of protection for the natural and cultural attributes of North Head.

http://winterwoman.net/tag/leptothrix-discophora, http://pubs.usgs.gov/gip/microbes/oil-like.html