

YARNUPINGS

ABORIGINAL HERITAGE OFFICE NEWSLETTER ISSUE #4 DECEMBER 2021



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YARNUPINGS

ABORIGINAL HERITAGE OFFICE NEWSLETTER

ISSUE #4 DECEMBER 2021

Welcome to the final issue of Yarnupings for 2021

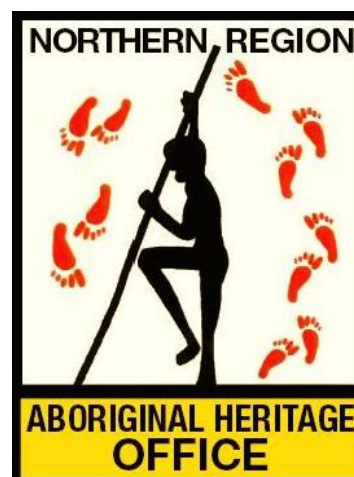
We made it! Crikey, what a year. Again!

We were excited at the prospect of opening up the Museum and having you drop by, but that might have to wait a bit longer while we find out what Omicron has in mind.

Special mention goes to all our amazing volunteers who continued monitoring sites throughout this challenging year.

This issue provides thoughts and reflections of the AHO staff, highlights two of our fantastic volunteers and provides some ideas for your summer leisure time.

Please enjoy the fourth and final edition of Yarnupings for 2021.

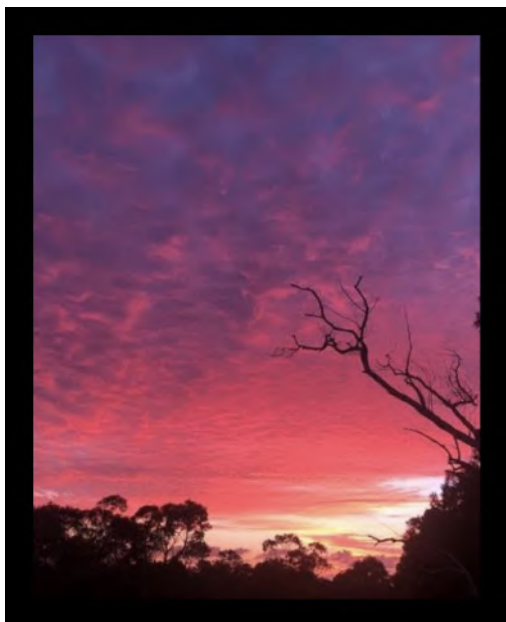


The AHO Team— Dave, Karen, Phil and Susan

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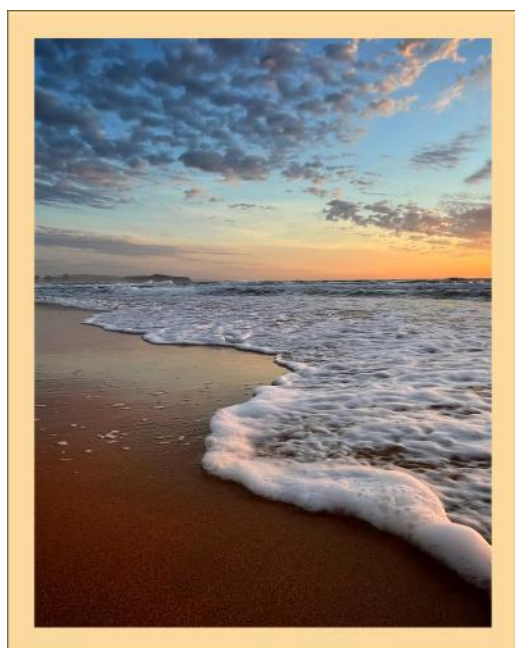


Cover Photo

Our gorgeous December 2021 cover photo was taken by Professor Paul Stewart, The University of Sydney.

The image, taken in November this year, is at dawn from Cliff Avenue reserve Ku-ring-Gai Chase. The silhouette of the termite mound often used by the local kookaburras as a nest, is a beautiful contrast to the breathtaking gold, pinks and purples of the sunrise.

Thank you, Paul, for your fabulous contribution to Yarnupings!



Breathe and relax

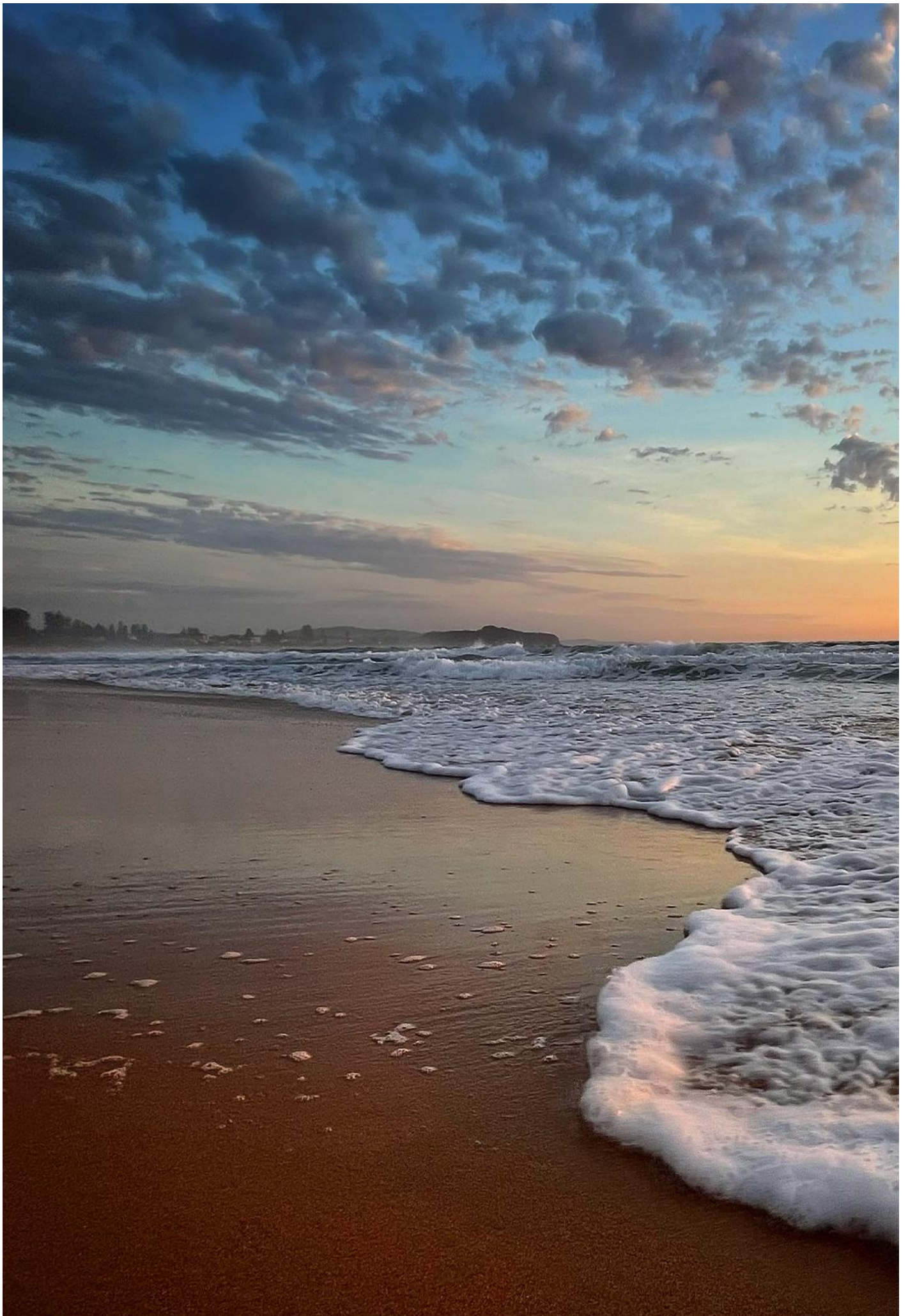
This serene image was taken at sunrise at Collaroy Beach, Northern Beaches.

Scientific studies show that simply looking upon a lovely serene image of nature will help to lower stress. So, in these strange Covid times, where you may not feel like you are able to get outside as much as you may like, take a moment or two to breathe deeply and enjoy the image. It's good for you.



We would love your feedback

This year our volunteers were surveyed about their volunteering experience. We have taken the responses and incorporated them into our practices and processes. But we would love to have your feedback too. Is there something that you would like to see in the Yarnupings? Is there something that you feel we are doing right? Is there something that we could improve. We want to make the Yarnupings an educative and enjoyable read. So drop us an email with your feedback. We would love to hear from you! Email: susan.whitby@northernbeaches.nsw.gov.au.



STEP TRACK



Kingsford Avenue, South Turramurra

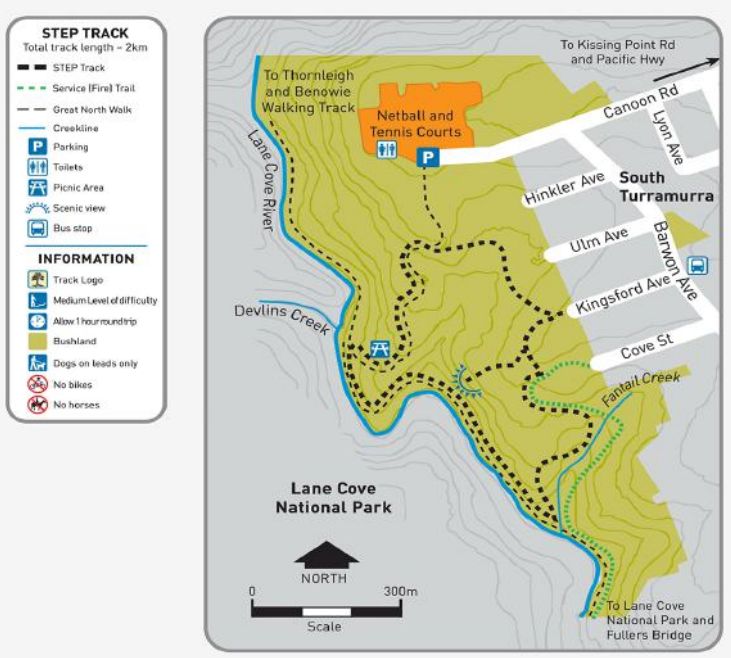
The Step Track is a gorgeous walk in South Turramurra. With bush tucker plants, sandstone outcrops and scenic views over the Lane Cove River, this walk is a must this summer.

Senior Archaeologist, Phil Hunt, explored the Step Track recently and was excited to come across the broad leaf geebung, *Persoonia levis*, with particularly large fruit. This bright green plant is native to New South Wales and Victoria. The fruit is edible but it is very difficult to find a ripe, tasty one. Best admired visually!

The walk is also a great opportunity for bird watching. Grey Fantails, Yellow Robins and Red-browed Finches are bushland species to be sighted along the Step Track and if you're lucky you may even catch a glimpse of the rare Pacific Baza.

For more information about the track head to the Ku-ring-gai Council website.

<https://www.krg.nsw.gov.au/Things-to-do/Bushwalking-tracks/STEP-Track>



Volunteer News

Meet Jen Matthews



I am a marine biologist and coral reef conservationist at the University of Technology Sydney. My research is dedicated to finding solutions to current environmental challenges, including enhancing coral reef resilience to climate change, and developing solutions to marine microplastic pollution. In 2020, I was named one of Science and Technology Australia's Superstars of STEM, a program to help smash gender assumptions in science and encourage more women and girls to pursue science topics. As part of this national program, I have been asked to provide an acknowledgement of country, but in researching the land on which I live, I realised I wanted to do more than just acknowledge the Traditional Custodians and pay my respect to the Elders past and present - I wanted to somehow protect the future of Aboriginal culture. And so fuelled by my passion for the protection and preservation of coral reefs, I hoped I might be able to help with the preservation of local Aboriginal cultural and heritage sites. My search took me to the AHO, and the incredible work they do to protect and preserve aboriginal sites north of Sydney. I'm very excited to volunteer as a site monitor and learn about how Aboriginal people would have lived in this area.



Happy International Volunteer Day!

Well, it was on Sunday 5 December 2021 but close enough. As the year comes to a close, All of us at the AHO would like to acknowledge our volunteers and the wonderful work they do. We have volunteers who have been with the AHO for 15 years, 10 years, 5 years, a dozen who have joined us this year and we already have a few who are ready to join the Volunteer Site Monitoring Program in 2022. Its really exciting!

Our volunteers are a delightful group, full of enthusiasm, knowledge and care. This year, volunteers were surveyed to gain feedback on their volunteering experience and how they would like to see the program improve.

From this feedback would like more education. So, in line with this great feedback, we'll be adding in more educational pieces in the editions of Yarnupings.

The Aboriginal Heritage Office 's volunteers are unique as site monitoring can be quite a solo endeavour. For some, that might be ideal, but for others the knowledge that they are a part of a community of like minded people all giving to preserve and protect Aboriginal cultural heritage is exciting and encouraging.

To our volunteers and Yarnupings readers, if you would like to know more about the archaeological processes used in site monitoring, please send through your suggestions. We are eager to learn about your areas of interests. We are also really interested in sharing the extraordinary knowledge base that our community brings to the program.

If there are interesting articles, books or information to share, I encourage you to share it.

While we may not see each other much, our Volunteer Site Monitoring Program is strong. The work the volunteers do is important. If you would like to become a Volunteer Site Monitor, please contact the Volunteer Coordinator, Susan Whitby On 0435 643 205 or email

Susan.whitby@northernbeaches.nsw.gov.au

Alternatively, if you are no longer able to interested in being a site monitor, please let us know as we will be able to redistribute the monitoring of the site.

Merry Christmas!

Susan



DEBARKING FESTIVAL

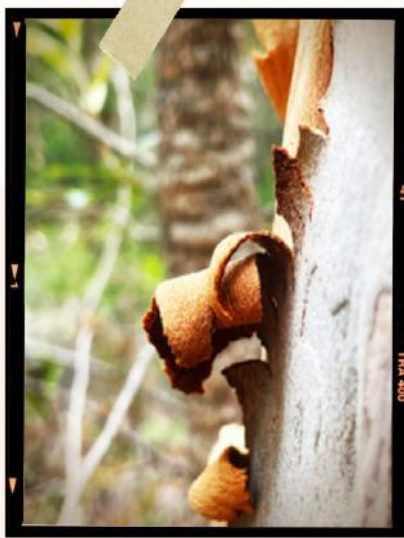
Did You Know?

November – December is the time of the Great Debarking Festival in Sydney. OK, we made the name up. Still, it's something that can be celebrated. If the Jacarandas get special mention for their purple plumage, why not all the locally indigenous smooth barked trees? They stretch out, shake off the old bark and give us all some magnificent sights. See the following page for some resplendent debarking.

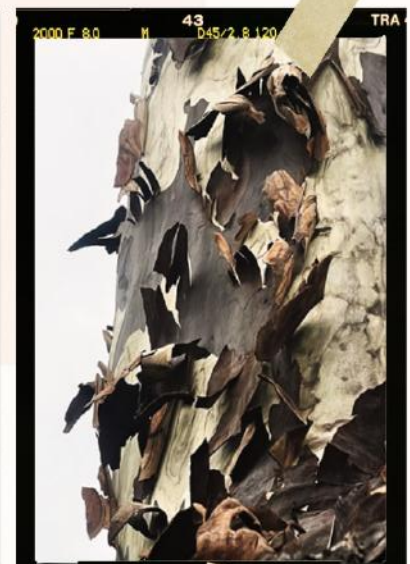
OUT AND ABOUT

We have been monitoring sites, reviewing DAs, removing graffiti, finding long missing sites and more. An on-going partnership with Macquarie University saw the drones out while sites subject to coastal erosion were recorded for 3D photogrammetry.





DEBARKING FESTIVAL



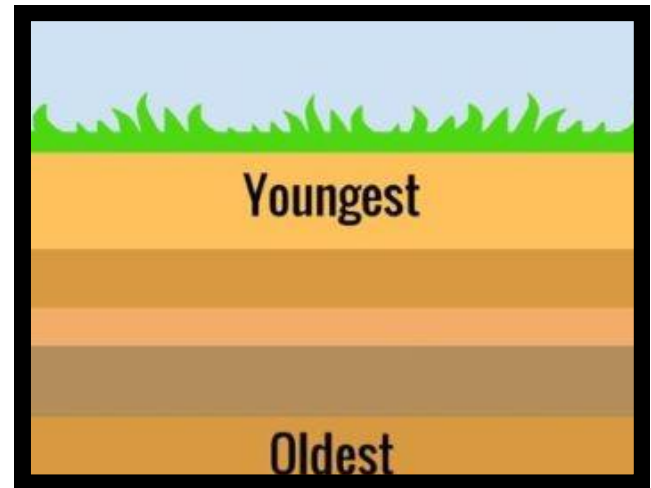
Stratigraphy

By Susan Whitby

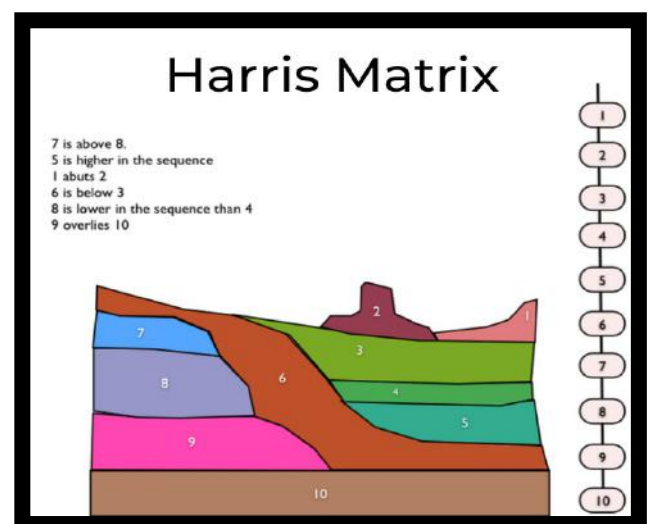
Developed by geologists, Jens Joseph Worsaae and Thomas Jefferson in the 1800s, the study of the layers of dirt is known as stratigraphy. The different layers of dirt, also known as stratified deposits may include soils, sediments and rocks and man-made features such as pits. This was refined for archaeology by Edward C. Harris in 1973.

Stratigraphy follows the Law of Superposition, which states that, in a given series of layers, without there being any alterations, the upper layers are younger and the lower layers are older as each layer is deposited atop of the layer below. Of course, this is not always exact, as layers can be disturbed through both natural and man-made processes, such as flooding or digging. Insect burrowing, known as bioturbation, can disturb the stratified layers.

So what's so important about stratigraphy? Stratigraphy helps archaeologists understand a site. By digging in small specified units, called a spit, we are able to see what is happening through the layers of deposition. Australian Aboriginal archaeology sees us digging in 5cm and 10cm spits. Perhaps there is a noticeable change in the sediment, denoting a change in environmental conditions. Perhaps there is a change in the number of artefacts reflecting a human event. Combining the environmental and cultural information results in a clearer interpretation of what was happening at the site and how it was being used. By using the Harris Matrix, archaeologists are better able to explain the often complex stratigraphic layering that occurs across archaeological sites.

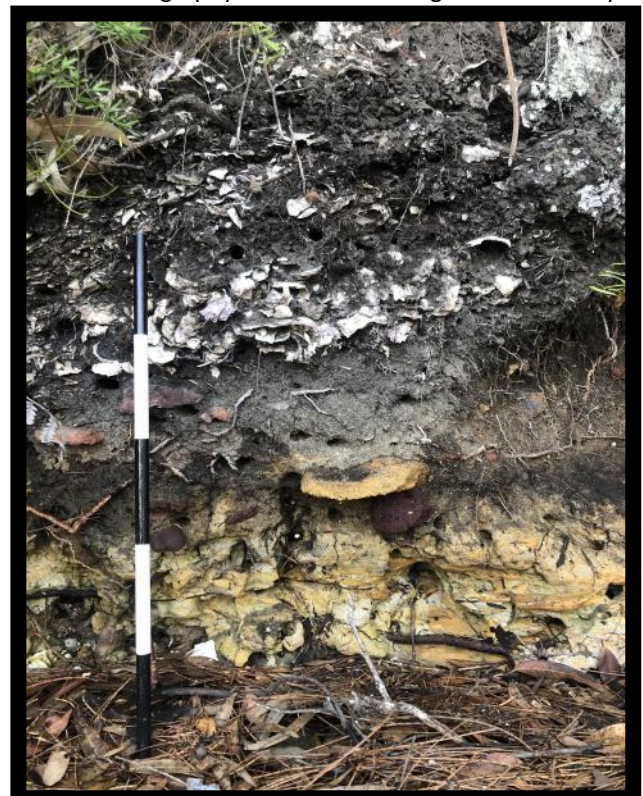


Law of Superposition. Image: study.com



Harris Matrix. Image: Wikipedia

Stratigraphy of a midden. Image: Susan Whitby



Whelks

Middens are one of the most common Aboriginal sites around the Sydney area. These shell heaps provide a huge amount of information about both the people who were living there and the environment at the time.

In Sydney, there are five main types of shells found in combination in middens: oysters, mussels, cockles, pipis, and whelks. But what do these shells look like? Why are they found in middens? Over the next few issues, we will look at the most common species of shells found in middens to begin to give you an understanding of what you are looking at whilst monitoring. We begin with whelks.

Whelks are a sea snail, a gastropod, with a whorled shell. The shell is usually long with a wide opening – an aperture- at the first whirl. There are two species endemic to Australia: *Pyrazus ebeninus* and *Batillaria australis*. Both of these are found right along the east coast of Australia, preferring mudflats and mangroves. *Batillaria australis* is the smaller out of the two species, with a maximum growth around 49mm in length. *Pyrazus ebeninus* is the bigger of the two and can grow up to 97mm. The lip of the aperture identifies the species. *Pyrazus ebeninus*, (otherwise known as the Hercules club mud whelk, or Sydney whelk) has a more flared outer lip. See images on the next page.

Whelks are carnivorous. They like to feed on other

molluscs, worms, crustaceans, and mussels. They drill holes through the shells to get to the soft tissues. You know when you collect shells at the beach and some have small hole in them (perfect for a necklace or decoration) well, they have been attacked by a whelk.

Whelks make for good eating themselves and are often found in Aboriginal middens. On average, per 100g, whelks pack a whopping 48% protein. They have minimal fat just 0.8g and are loaded with a variety of minerals.

Image: Susan Whitby



Whelks

Often found in shell middens, the meat from the whelks would have been prised out with sticks, stone or bone tools after being collected from the mud flats. The oldest shell midden in the Sydney area is at Jibbon, in Royal National Park, date to 3,000 years. Whelks are commonly seen in and amongst the material in the middens along Sydney's northern coastline.

But before you try your hand at collecting them, there are a few things you need to know. Firstly, the maximum number for collection is 20. It is illegal to gather more. Secondly, there is only a small amount of meat (there is a lot of guts though). And thirdly, breeding takes place during summer, so its important to understand the lifecycle of whelks before you think about collecting anything. Also, they are often hosts to parasitic worms that live in sea birds.

Next time you see a mud whelk, see if you can identify which type you're looking at!

Sources:

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- South coast whelks a new commodity for illegal fisherman, 2015. <https://www.abc.net.au/local/stories/2015/06/16/4255862.htm>
- Beechley, Des. 2005. https://seashellsofnsw.org.au/Batillariidae/Pages/Pyrazus_ebeninus.htm
- Beechley, Des. 2005. https://seashellsofnsw.org.au/Batillariidae/Pages/Batillaria_australis.htm



Pyrazus ebeninus—Sydney Mud Whelk



Batillaria australis—Australian Mud
Middle Harbour Midden

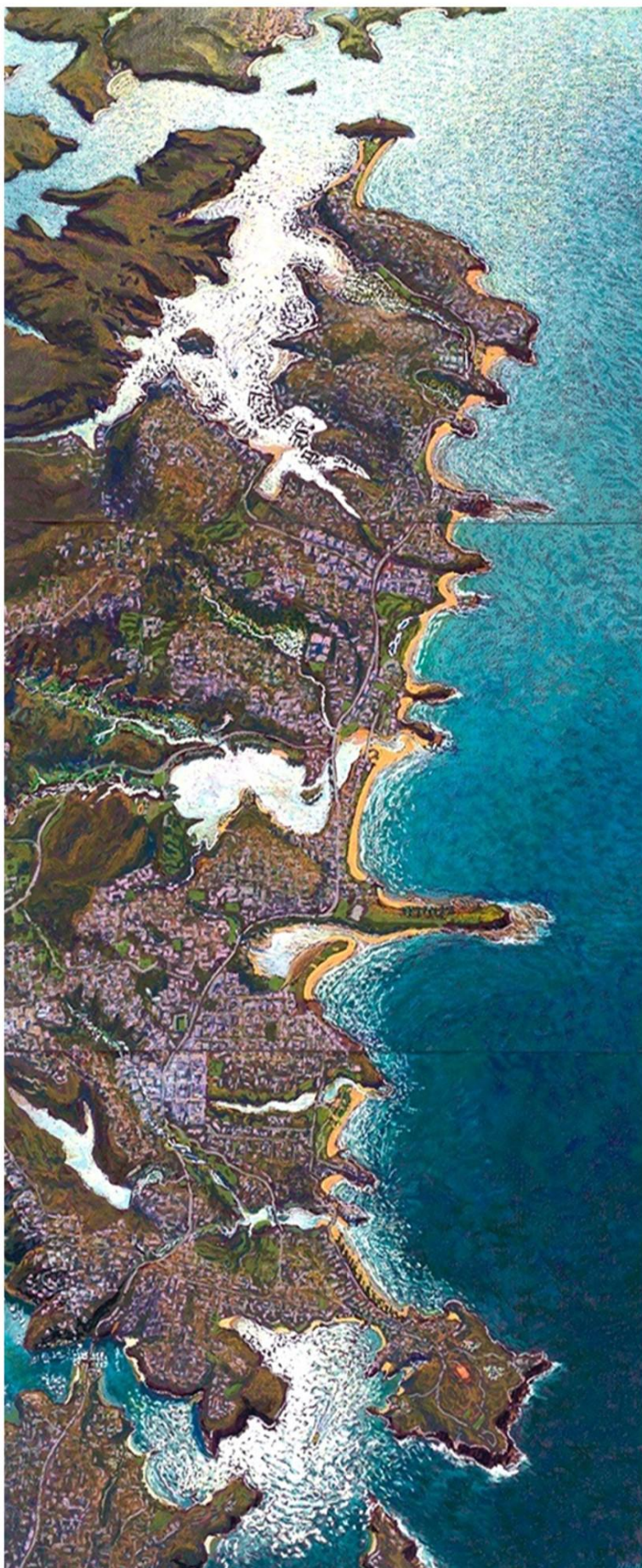


Wetlands

By Karen Smith

As the Education Officer at the AHO, this year I have found myself talking about our land-based sites, but talking also on our sites and resources in our oceans, rivers, creeks, estuaries and wetlands. First Fleet paintings reveal Aboriginal people's seasonal reliance on these waterways in our Saltwater Country and the freshwater or food resources they produced. Early photos and paintings reveal picturesque waterfalls, rainforest gullies and deep and fast flowing pools, creeks and rivers.

Aboriginal people for thousands of years carefully maintained the delicate balance of the waterways and their need for food and resources. This balance was so necessary to the survival of many species and the Aboriginal people that lived there.





Narremburn Falls, Willoughby

Bicentennial Reserve near Small Street, Willoughby is where the upper valley of Flat Rock Creek. Early last century, the creek passed under Willoughby Road at Flat Rock Creek Bridge before cascading over Naremburn Falls, the highest waterfall in the Sydney region, into what was known as The Devil's Hole to the east of Willoughby Road. It then flowed down to Long Bay at Cammeray after passing under Cammeray Bridge.

When the land above the Naremburn Falls was cleared and subdivided, the creek's flow was reduced considerably. In an act of short-sightedness, the Willoughby Council then began using Devil's Hole and the upper valley as a rubbish tip and by 1930 had begun filling it in.

<https://www.visitsydneyaustralia.com.au/lost-waterfalls.html>



Around Narrabeen Lakes



National Library of Australia

nlc.pic-an2962715-s10-v



Warriewood Wetlands

Mermaid Pool Manly 1930s





Historical photo from the Kuringgai area

Many early stories reveal the pillaging and the draining of wetlands – referred to as swamps. Estuaries and wetlands filled with garbage and other refuse to create more land. Dynamite was also used to catch fish. It was a resource to be plundered.

'Sydney, it is true, need not be at all alarmed for the supply of oysters in her market, for no sooner is the wealth of one river exhausted than the dredgers can turn to another....which has not yet been rifled.'

The Sydney Mail, Saturday, 9 September 1871:

Staked nets, sometimes a mile (1.6 kilometres) long, were set up on the mud flats inside the low water mark and when the tide fell the fish were trapped on the sand banks. Fishermen then just picked up the fish they wanted but left the rest to rot. Liming and dynamiting of fish in tidal waters also took place whereby the fish were poisoned or stunned for an easy catch.

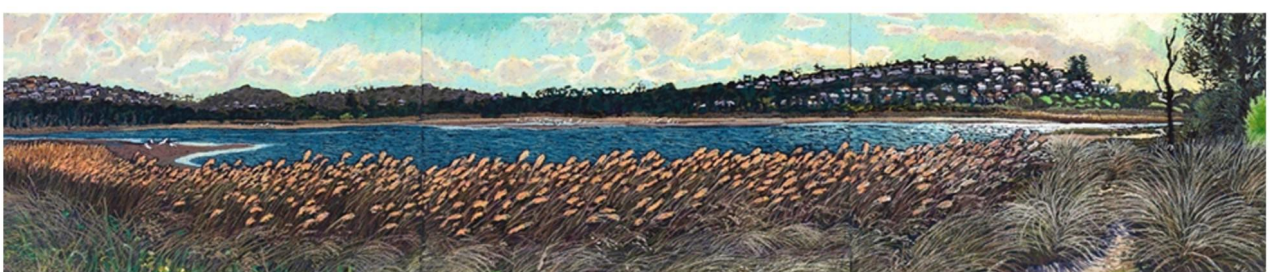
The idea that a fishing ground could be plundered and then another found for the same purpose was losing traction in the second half of the nineteenth century. The same fishermen who harvested the waters of Botany Bay as if there was no tomorrow were realising the damage it caused. The first sign of overfishing and over-dredging was seen in the rapid depletion of the Botany Bay oyster stocks, in high demand by Sydney's food and building industries. By 1896, the mud oysters of Botany Bay were declared extinct.

Joanne Sippel, 2013, Booralee Fishing Grounds

Our harbour became an industrial hub, tin smelters with their use of arsenic, factories dumping all manner of residues and other polluting industry lined the waterways. The Americans manufactured *Agent Orange* at Homebush Bay and the residue dumped in the harbour. The Coal Loader at Balls Head and the Walter Burley Griffin and Nicholls Incinerator at Flat Rock are some that still stand as a reminder of this industry. Even though nearly all of this industry has gone, apart from the Gore Hill refinery, you are advised not to fish west of the Harbour Bridge.

Today we are still putting all in danger through our continued development and subsequent erosion and pollution we are putting our waterways.

Nick Hollo Dee Why Lagoon



Val Attenbrow has collated a list of Aboriginal names for different species of fish as recorded by early British colonists in the Sydney region:

<i>badoberong</i>	<i>small tadpole-like fish</i>	<i>mullinagul</i>	<i>small flathead</i>
<i>Barong</i>	<i>prince fish</i>	<i>Murraynaugul</i>	<i>flathead</i>
<i>cagone</i>	<i>toad fish (poisonous)</i>	<i>waaragal</i>	<i>mackerel</i>
<i>cowerre</i>	<i>large flathead</i>	<i>wallumai</i>	<i>snapper</i>
<i>karooma</i>	<i>black mackerel</i>	<i>waradiel</i>	<i>large mullet</i>
<i>maromera</i>	<i>zebra fish</i>		

I have been proud to see many families, groups of community take plastic bags with them as they walk, collecting the rubbish and plastic that pollutes our coastal areas. On a recent walk near Little Manly much fishing line was found blowing around. The group worked with me to collect this and dispose of it in the correct disposal unit.

As you enjoy your summer in the waterways and oceans take care to bring your rubbish home and look after our garden in the water.

SO MUCH FOOD at different times of the year.



Spotted
Mackerel



BlackFish



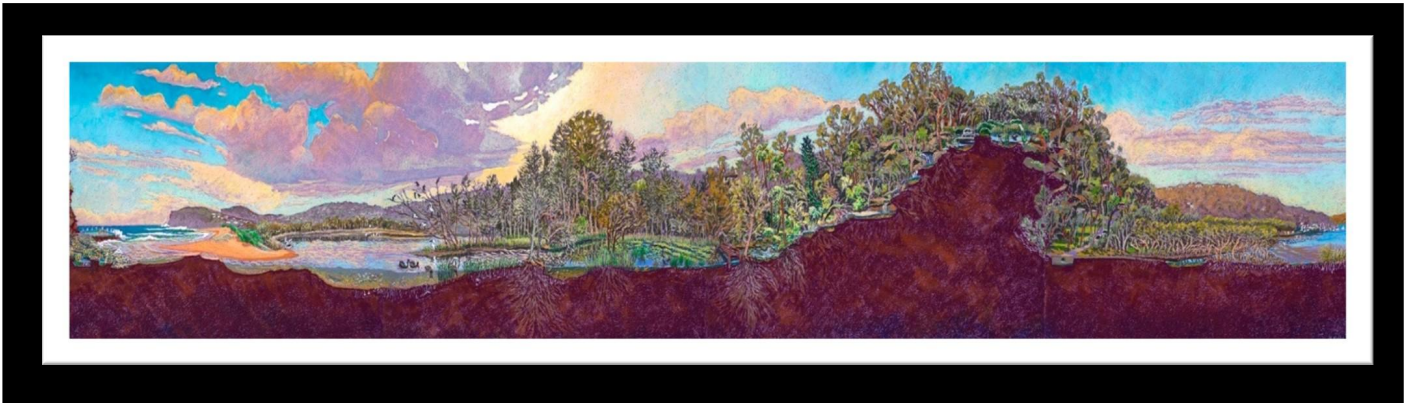
Bream



Flathead

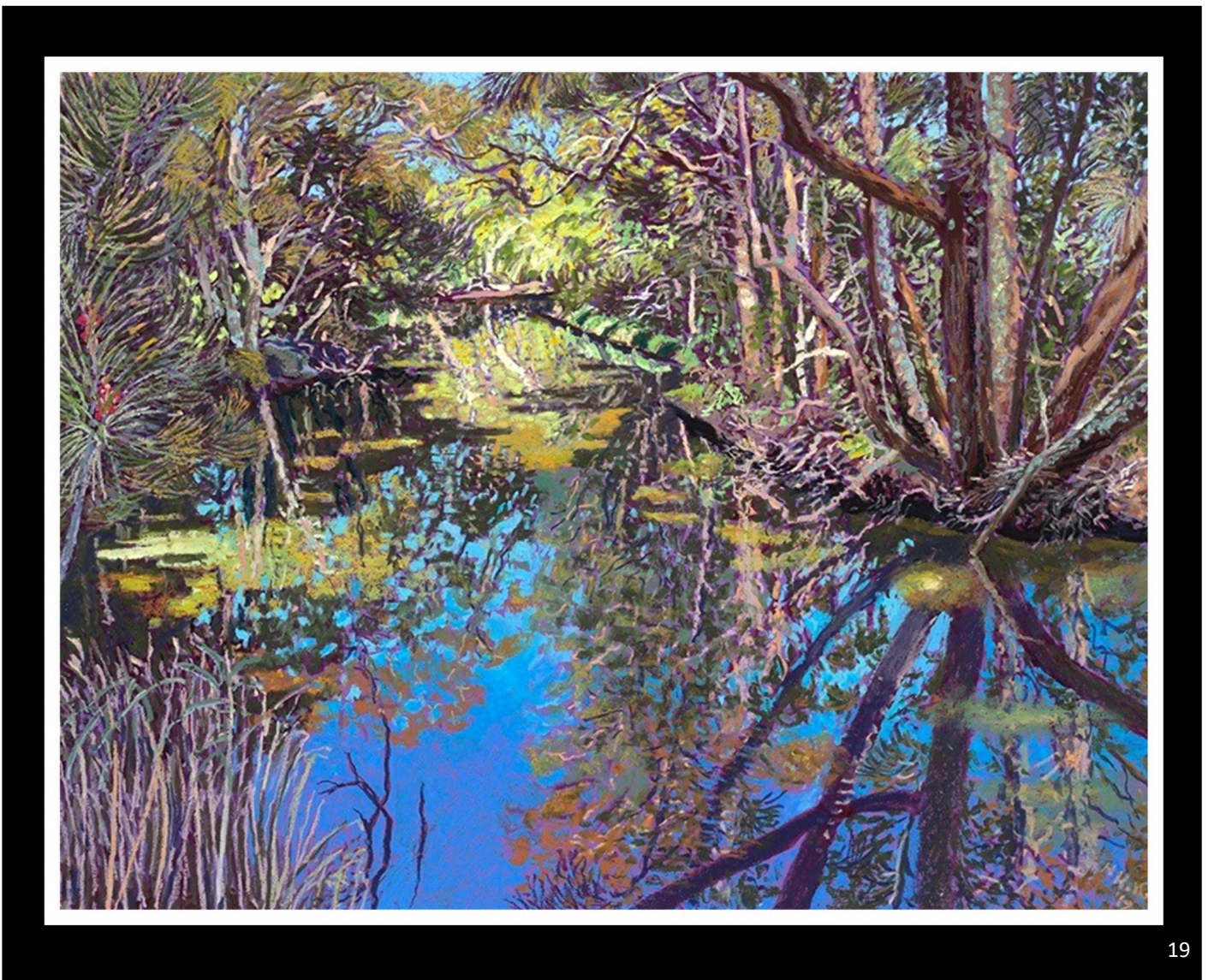


This painting by Nick Hollo shows cross section of coast and the importance of the estuaries.



Nick Hollo Manly Creek

This was one of the creeks dammed to make Manly Dam.



The Unexpected ... !

By Phil Hunt

If you go down in the woods today, you're sure of a big surprise 1

Whenever we go out to visit a site we rarely find things exactly how we expected them to be. Sometimes it is the wildlife. Cockatoos screeching from above. Lorikeets peeking out from a hollow. A startled wallaby thudding through the scrub. Perhaps a brush turkey standing on a parked car, or nonchalantly considering his handiwork of having exposed 20m² of shell midden, or having dug a fresh hole in a rock shelter (without a permit!). And you never know who gets the bigger surprise when you startle a goanna. Snakes? Shhh! If you don't mention them...

Then there are the people encounters. One time on a group walk at the end of Berry Island we were very surprised to find a double bass moving towards us.

"I think the jazz event is at the other end of the island," we suggested helpfully.

"I know", was the terse reply. Enough said.

We've startled and been startled by dog walkers, bike riders, climbers, bush regenerators, teenagers carrying a couch, a homeless couple pushing a shopping trolley, and various residents who live adjacent bushland and weren't expecting an AHO person to appear. Once we bumped into ABC TV presenter Costa Georgiadis and the Gardening Australia film crew.



Not sure who was more surprised—the snake or the archaeologist who dug it up. You've never seen a bunch of archaeologists move so fast! We were out of the trench in the blink of an eye and then we stood still... for about an hour, waiting to see what the snake would do. The brown snake whipped around in shock and pain for a good long while, we could see where the shovel had hit its tail. Then it curled up and warmed itself. Finally it slithered out of the excavation and headed off into the bushes. We breathed a sigh of relief and gingerly headed back to work.

Susan

The Unexpected... ! Continued

It's always a welcome surprise to see bushland management or other council staff who are at the same reserve at the same time. It's a good chance to have a quick catch up with part of the Council family.

Sometimes the unexpected is really unexpected. Last month when heading into a reserve with Heritage NSW to assess and start removing graffiti from a site we bumped into a press conference with the NSW Opposition Leader, Mr Chris Minns. In the press bubble that we had to walk through we felt the odd ones out until we could scramble out of sight. Yet another surprise later on was when Mr Minns popped his head around the corner to ask if he could see what we were doing. A couple of journos were the only other ones to risk their town shoes and city clothes to climb down the narrow chute and join us. Unfortunately the story of increased impacts to Aboriginal heritage during lockdown didn't make the news. You don't have to be monitoring sites to take advantage of the amazing places we live and work in. And as the Christmas Season approaches, the unexpected is sure to find you, whether you're ready or not!

“You have to take risks. We will only understand the miracle of life fully when we allow the unexpected to happen”.

Paulo Coelho

These photos are three unexpected delights spied whilst out on site. Next time you're in the bush or down at the beach, why not challenge yourself, family or friends to a natural treasure hunt. ?





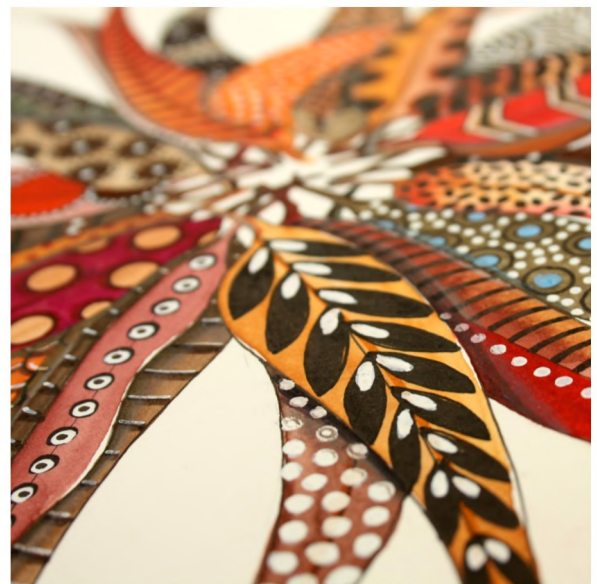
Leaf Art

This Christmas, be inspired by the bush in your local area.

The ever present leaf litter on the ground makes the perfect canvas for beautiful leaf art. Paint them, colour them, glitter them.

Once decorated, you could make a garland, or add them to a present as a natural flair to your gifts. Leaf Art is a Christmas activity suitable for little kids and big kids alike. So grab a paintbrush, sharpie or glitter pen and have fun adding the Aussie bush to your Christmas this year!

These beautiful designs were created by Elena Nuez @ Bicococolors.



Eat

Bush Tucker

WANT TO ADD IN BUSH
TUCKER FOODS TO
YOUR FESTIVITIES THESE
HOLIDAYS BUT NEED
INSPIRATION?

CHECK OUT THE RANGE OF FABULOUS
BUSH TUCKER COOK BOOKS AVAILABLE
ON LINE OR IN YOUR LOCAL
BOOKSHIOP.

**Great
PRESENT
IDEA**

Aboriginal people have shared their knowledge
with others for generations. It's good to support
Indigenous communities, businesses and authors
when purchasing bush tucker products.