Interconnections



Tasmanian Aboriginal people have responded to, maintained and modified cultural and environmental systems for millennia. The following article explores some of the interconnections between these systems in a coastal context.

CROSS CURRICULUM PRIORITIES

Aboriginal and Torres Strait Islander Histories and Cultures

CONTENT AREAS

- Geography
- s Science
- Humanities and Social Sciences

GENERAL CAPABILITIES



Intercultural Understanding



Critical and Creative Thinking

KEY CONCEPT

Interconnections: The components of various systems such as social systems, resource systems and natural systems, and the connections within and between them, including how they impact on each other.

ACARA

SUPPORTING CONCEPTS

- > cultural heritage
- ecology
- > coastal monitoring
- liveability

GUIDING QUESTION

How can we understand the interconnections between Aboriginal people, Country and culture?

This printed material is to be used with Shell Stringing - a Living Cultures multimedia curriculum resource that can be found at www.theorb.tas.gov.au

The Living Cultures Shell Stringing resource and this supplementary printed material have been designed to foster culturally responsive practice when learning about Tasmanian Aboriginal Histories and Cultures.



Coastal Ecosystems

The interconnections between the health of coastal ecosystems and cultural practices are spoken about by several shell stringers.



Melissa and Kasey West collecting maireener from one of their favourite patches. | Image: Dcnstrct

There's a patch that I've been collecting from for about 10 years. So the last time I collected was two years ago. I like to give it a break just so they can rebreed, and I was there for three days and I didn't find a single one. So I don't know whether they've up and moved or if there's something in the water that's killed them.

And it's so hard because you – it makes you a little bit sad, because if they have died off, why? The elders have said to me that have taught me, the women said that they notice less and less. If we lose that patch then it's one less patch that the future generations have got to choose from, and we don't have that many that we can choose from.

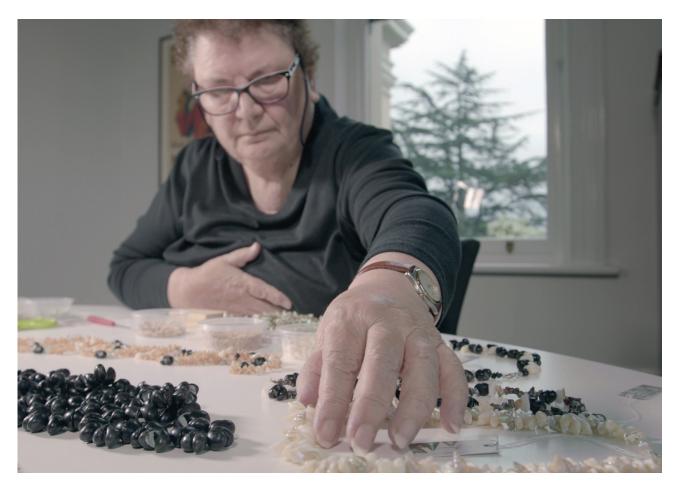
When you are out there, you look around and you put things together and you go, 'this is why this happens' or 'this is why they sit here'. I mean, I learn every time I come out here.

I learn different tides or different weather, different seaweeds, learn every single day. Especially, our culture.

Whenever I'm out on Country doing something like this, I always give thanks to the ancestors ... and think about what they used to do, and even when we're walking along the track, there was three or four bits of food I've seen along the way and you look around and go, 'this is exactly why they lived here'.

Especially, our culture. That's the important part that I want to make sure my girls know. It's not just a take it for granted – let's go out and pick the shells, it's all those little things that they've got to learn to value what they are given.

Melissa West: 2018



Lola Greeno with a selection of her shell necklaces. | Image: Dcnstrct

I've been back to Flinders several times since living in Launceston with my family for almost 40 years to gather shells from Yellow Beach. We have noticed a great change in the coastal environment, making it hard to collect shells for our necklaces compared to what it used to be at Yellow Beach.

We brought back samples of the seaweed and have taken those samples to the Australian Maritime College to the staff who study the changes to the water and there is a perception that the waters are being affected by different pollutions from within the area itself with lots of new buildings and different run offs from the land.

It seems as maybe through exposure to the tea trees and the tannin from those tea trees seems to be burning the tips of the shells while they are still clinging to the live kelp in that area.

Yellow beach has many collecting places but it is now suffering from unknown pollutions that are affecting the breeding areas of our traditional *maireener* shells used in the earlier necklaces and which we continue to use today but we use them very sparingly. We put them together with other shells making it a necklace of assorted shells, rather than just the *maireener* shells.

Some of the areas in Yellow Beach are now depleting and we've talked to people for advice on this and so we give those areas a rest and we've moved around to other places and found new areas in Lady Barron.

But Yellow Beach is a beautiful beach that we used as kids and now when the tide is out we still love walking from one end to the other.

Lola Greeno cited in Australian Design Centre, 2014

DISCUSSION QUESTIONS

- > What do Melissa and Lola tell us about the interconnections between *maireneer* shells, coastal ecosystems, culture and people?
- > In what ways do changes to ecosystems impact on cultural practices?
- > What other kinds of interconnections might be impacted by a decline in the health of coastal ecosystems?

Interconnected Systems

Tasmanian Aboriginal people, cultural systems and coastal systems have been interconnected for millennia. These interconnections are expressed in many ways.

Poetry is one such expression. In the poems below Theresa Sainty expresses and maps some of the complex interconnections between herself, her community, ancestors, practices, and places.

Pakana-mana takara lutruwita paywuta manta. Muyini ningina manina wurangkili-tu pumila Palawa.

My people have been here since the beginning of time. Since Muyini the Great Spirit took some earth up into the sky and created Palawa, the first black man.

Theresa Sainty cited in kanalaritja 2008: 11

Waranta tunapri luna ngini paywuta ningina marina: pumili laritha: purpari rinal mapali laritja-ta pumili kanalaritja nayri. Luna rrala: tunapri rrala; paliti rrala manta paywuta.

We remember the old women of long ago collecting marina shells, making string: putting shells onto string to make beautiful necklaces of shells – kanalaritja. Strong women, strong knowledge, strong spirit. Long way, long time (forever).

Theresa Sainty cited in kanalaritja 2008: 8

The excerpt below from *Sea Country: An Indigenous Perspective* articulates this deep sense of interconnection between people, culture and Sea Country.

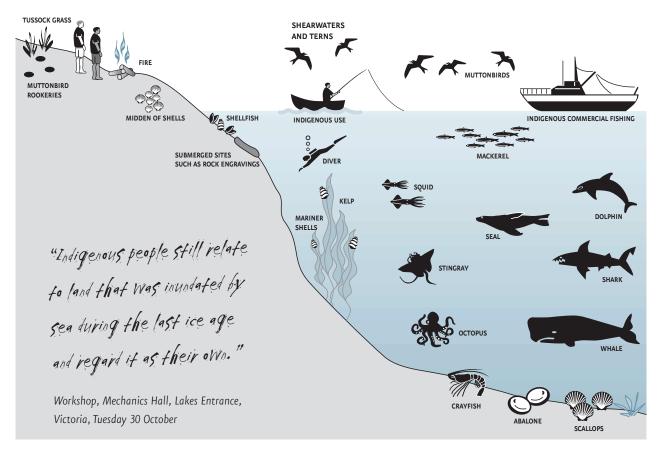
This report forms part of *Australia's Oceans Policy* and regional marine planning. This Policy provides a framework for the people of Australia to explore, use, protect and enjoy our extensive marine resources.

A common feature of coastal Aboriginal cultures is the connectedness of land and sea: together they form people's "Country" – a country of significant cultural sites and "Dreaming Tracks" of the creation ancestors. As a result, coastal environments are an integrated cultural landscape/seascape that is conceptually very different from the broader Australian view of land and sea.

Indigenous people make no distinction between land and sea. They see themselves as having responsibilities and rights across the land and sea boundaries.

Sea Country - An Indigenous Perspective 2002: 2

The diagram below depicts the interconnections between land-based and sea-based activities from an Indigenous perspective.



Indigenous use of oceans and marine resources. | Sea Country - An Indigenous Perspective 2002: 3

Rodney Dillon, a Palawa Elder, presents his perspective on Sea Country and the interconnections between Aboriginal values, identity, Country and cultural resources.



Rodney Dillon talks to a wide audience about coastal interconnections in the *Coastal Gathering* segment of Foods | Image: Donstrot

The complex nature of Indigenous life, our ocean values and our use of ocean resources is determined by our cultural laws and ways. Our identity as Indigenous people comes from our country – our land and our Seas. We have maintained our connection to sea country and we continue to look after our oceans. This is part of our cultural responsibilities for country, and for each other.

Our culture and our view of oceans aren't fixed in time. They aren't held in an institution. They don't hang upon a museum wall. You won't find them searching the texts of the many scientists that have studied our people's ways. Oceans are a part of us, and we are a part of them.

It's an ancient relationship that Aboriginal people of the South-east Marine Region share with our oceans. It's dynamic; its expression changes with the environment around us. In many ways, we are a changed people.

The essence of our modern ways goes back to a time when the oceans were our own, and our concerns were very different than they are today. Our view of economics is as broad as our view of country. Our cultural economy is sustainable. Our economy is driven by our relationship to our resources. The health of these ocean resources, and the ecosystem as a whole, is the foundation of the Indigenous economic system.

Dillon cited in Sea Country – An Indigenous Perspective 2002: 10-11

DISCUSSION QUESTIONS

- > What interconnections are being described in the above statements?
- > What might impact on the interconnections described by Rodney

Interconnections Encoded in Country

Tasmania has the most undeveloped coastline in south-eastern Australia with hundreds of uninhabited islands. Some of our coastlines contain Aboriginal heritage sites, especially shell-middens, of a richness and extent that have few parallels in the world.

Department of Primary Industries, Parks, Water and Environment 2013: 10

The West Coast of Tasmania has outstanding examples of these undeveloped coastlines.

Through her reading of the landscape on the West Coast Sharnie Everett, Palawa woman and Cultural Heritage Officer, reveals a multitude of interconnections between cultural and environmental systems across long periods of time.



Sharnie Everett walking Country dwarfed by the midden to her right | Image: Dcnstrct

I have walked much of takayna and spent much time in the traditional lands of the north-west tribes. I have studied the landscape and learnt to look across it with cultural eyes. This way of seeing the landscape has taught me much about the old people, my ancestors. It has shown me a picture of the way they lived, the way they journeyed and the way they died.

Walking the coast I feel a great sense of connection to the ocean, with the roar of the waves beating constantly and the sound of water running, stripping itself from the beach back into the ocean. I see the abundance of bull kelp stretching for miles down the beach, a traditional resource shimmering and ripe for the taking. Remembering how the women would collect this and how we still collect it today, forever studying the mass of kelp in order to find the best piece and wishing I did not have so far to travel, for if not, I would have certainly taken it with me.

Walking through this country it is not hard to see the ways of our old people; hut depressions forming villages surrounded by middens, stone tools ochre and fire hearths all captured in the one landscape. I can sit in these places and know I am sitting in the same place as those who have shared the same deep spiritual connection, the same

appreciation and sense of belonging. I sit in this place and feel I am seeing the same home they once looked at and I feel an uninterrupted connection to both my people and my country.

takayna, like no other place, can still show me this picture. It's still all here, and the connection is still vibrant and strong. The landscape shows me the story and gives me the ability to share this story with my children and with others from my community. takayna provides me with the tools to continue the unbroken cultural connection, to share cultural knowledge and to become part of the story for the future. Every part of the landscape shows me and tells me a different chapter of the story of time and life. The grass plains behind the dunes show me a way of understanding how to manage the land, how to manipulate the environment that is best for all. The burning of country in a cultural way provided food for everyone, from the birds which fed on the seeds of the new grasses, to the tringana/tara (male and female kangaroo) which feast in its plains; it shows me where our people hunted to feed their families. The burnt off grass plains also show me the way, how to move through the land following the same pathways as those who have walked this country before us.

... As I walk through the middens I find myself studying the many bones from past meals eaten here looking for the remains of the fire pits by find layers of charcoal and ash. These layers don't just tell me this was a place of cooking and eating a meal, but a place where stories were shared, lessons were taught and life was lived. They represent a continuation of culture and generations of knowledge. Looking further

around the middens I find stone tools showing multiple uses, hammer stones and even bone needle points are all reminders that this landscape, as wild and raw as it seems to some, is actually a home. It is a living portal to what once was a way of life, a way that has changed but not left and is not forgotten, just lived in a different way today.

Everett cited in TAC 2016: 12-13

DISCUSSION QUESTIONS

- How do these sites inform our understanding about the interconnections of complex systems over time?
- > How could we map or describe these interconnections?
- > Who, in a contemporary context, has responsibility for maintaining and managing the complex social, historical, cultural, economic interconnections that exist in these coastal ecosystems?

Shells, Sites and Stories



The highly valued maireener shells | Image: Dcnstrct





Abalone and waireener fished by Tasmanian Aboriginal Women | Images: Emma Lee

Dr Emma Lee, a *Trawlwulwuy* academic in conversation with a science writer discusses the impacts of environmental changes on Tasmanian Aboriginal cultural and economic systems and identity.

The excerpt below is from the article written by the journalist based on this conversation.

As she steered her way through the winding terrain Lee made sure I was up-to-date on the kelp-forest situation. Most Tasmanians can tell you how important the kelp has been for the shellfish and lobster industry, and I'd spent a few weeks with scientists at the Institute for Marine and Antarctic Studies before meeting Lee to get an idea of the empirical changes going on underwater. As it turns out, the Macrocystis forests have been totally replaced by urchin barrens: eerie submarine deserts formed by Centrostephanus rodgersii, betterknown as the long-spined sea urchin.

I flew to Hobart to pay my respects to an ecosystem already long gone. Tasmania's giant kelp forests, Macrocystis pyrifera, once fringed the eastern coast. Each languid frond of these once-towering marine metropoles harboured multitudes of fish, invertebrates, plankton and algae. But giant kelp forests are fragile: they can only grow to depths of thirty metres, and they require cool waters with high nutrient levels, a rocky seafloor for their gnarled holdfasts to cling to. Tasmania is one of the few places worldwide with the ideal conditions for Macrocystis, along with New Zealand, the American continents and South Africa, but climate change has taken its toll.

As of 2017, only five per cent of the original Tasmanian kelp forests remained.

It was hard to imagine this submarine devastation when we arrived at the sparkling vista of Opossum Bay. After a short walk along the beach we reached our destination: a living midden site, which appeared to me as a seaside build-up of billions of sun-bleached shells stretching right down to a rocky point in the water. The tides did not bring these shells here, though; people did.

Before us, Lee laid out the marineer shell necklaces unique to Aboriginal Tasmania, famous for their stunning blue-green iridescence. They're also known as rainbow kelp shells, or Phasianotrochus irisodontes, and are found living in the deeper intertidal zones from the Bass Strait down the entire eastern coast of Tasmania. Below us, 6000 years' worth of shell debris from Aboriginal people's meals were layered to form the living midden, 'living' not only because middens change over time, from winds, erosion, and new layers, but because they are still used by Aboriginal people as pathways and markers, as meeting places. They are a living reminder of identity and place in country.

Lee's marineer shell necklaces are from the kelp forests. So too are the layers of midden shells. The species that make up the middens may be long-dead, but their strata are a record of millennia of marine life and fishing practices.

'In Tassie there's anything up to about two dozen types of [shellfish] species,' Lee said. 'The majority of them of course are the larger species like abalone, crayfish, but also werriners, cat's eyes, mussels, oysters, periwinkle, any big rocky platform species. There wasn't too much we didn't actually have a go at.' She pointed out that Tasmania's precolonial fisheries were far more diverse than the wild fisheries of today: the state earns \$168 million each year from its rock lobster and abalone exports. The shells of species littered throughout Tasmania's middens offer an extensive and well-preserved record of the historical shifts in shell size, abundance and diversity. The middens can tell us a lot about both the culture of Aboriginal Tasmanians and the ecosystems they steward, yet very little study has been done on the middens' ecological value.

'We actually have this amazing marker of climate change and sea level rise,' she said. 'All across Australia we've got these heritage registers of middens ... When we're talking about coastal, saltwater ones, we've got an

Aboriginal people value ecosystem health as a foundation for a range of important associated values. Aboriginal cultural belief is that the Land and Sea possess spirit and stories, and that the land and its many living creatures can convey these spirits and stories,

in-built monitoring mechanism.' And yet, she is worried that just at the point in time where scientists might recognise that a midden could be an invaluable marker of climate and species range shifts, they'll be washed away by rising tides.

'I fear for what we call our cultural keystone species ... When part of my identity is connected to these middens, and they're gone, how does that affect my identity as an indigenous person?' she said. 'I see those kelp forests like the arteries and veins in our bodies, our women's bodies, and when those forests are gone, I know I'm going to feel that loss, within my own body.'

Over the next century Tasmanians – especially Indigenous Tasmanian women – will barely recognise their submarine landscapes, and they will feel this ripple through their cultural identity. Living midden sites will be washed away. The precious marineer shells will be harder to find. The process of cultural recovery among Aboriginal Tasmanians will be further hindered by weather, waves, species shifts, and other hallmarks of the Anthropocene. 'I'm an optimist,' Lee said, 'My cup runneth over, and I genuinely believe the next generation will do so much better, all of them. That's why I think my role is one of visibility, legitimacy.'

Cockrill cited in Overland 2018

often as living messengers or markers in the landscape. For these values to survive, respect must be given to protection and maintenance of the natural and ecological systems that maintain these values.

Your Marine Values - Public Report 2013: 11

DISCUSSION QUESTIONS

- > What are some of the values associated with these coastal systems?
- > What is the extent of these interconnections in coastal contexts?
- > What are the implications for interconnecting systems when an ecosystem is disrupted?

www.theorb.tas.gov.au//living-cultures/shellstringing/teacher-drawer

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Tasmanian Aboriginal Centre (TAC), 2016, takayna, Bob Brown Foundation



