

Livelihood values of Indigenous customary fishing

Final report to the Fisheries Research and Development Corporation



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Charles and Joe shucking a razor fish at Alexander's Beach, Ceduna, SA, 12 December 2016.

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People helping Aboriginal cultural-commercial fishers with their beach haul, Barlings Beach, NSW, 26 January 2015.

Photographer: Wally Stewart.

Jason and Jarrod netting garkuyi (bluetail mullet) northwest of Milingimbi, NT, July 2017.

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Fresh garkuyi (bluetail mullet) for sale at the shop in Milingimbi, NT, July 2017.

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Cooking oysters over coals at Point Vivon, SA, 20 May 2017.

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Barbecuing mutton fish (abalone) for a community gathering at Narooma, NSW, 19 March 2016.

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In submitting this report, the researcher has agreed to FRDC publishing this material in its edited form.

Aboriginal and Torres Strait Islander readers of this report are respectfully advised that it may contain the names and images of people who have died.

This report also contains references to topics and events which some readers may find distressing, including massacres, forced displacement, dispossession, racial prejudice and discrimination, incarceration and mental illness.

All efforts have been made to ensure that cultural knowledge contained in this report which could be considered sensitive, secret or sacred has been deemed fit for public dissemination by those who own or are responsible for it. To this end in some instances general descriptions have replaced the detailed information that research participants originally provided.

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- Maringa and all the Yan-nhaju and Yolŋu bapurru of Yurruwi, Murrunga, Laŋarra and all the other lands and seas of the Crocodile Islands
- All the Aboriginal clans, peoples and nations of the South Coast of New South Wales

We acknowledge that it always was, and always will be, Aboriginal land and waters.

Abbreviations

ACL	Aboriginal Coastal Licence
AFRG	NSW Aboriginal Fishing Rights Group
AIATSIS	Australian Institute of Aboriginal and Torres Strait Islander Studies
DPI	NSW Department of Primary Industries
FRDC	Fisheries Research and Development Corporation
FWCAC	Far West Coast Aboriginal Corporation RNTBC
IRG	Indigenous Reference Group of the FRDC
LALC	Local Aboriginal Land Council
MOPRA	Milingimbi and Outstations Progress Resource Association
NRIFS	National Recreational and Indigenous Fishing Survey
PBC	Prescribed Body Corporate
PIRSA	Department of Primary Industries and Regions, South Australia
RNTBC	Registered Native Title Body Corporate

Executive Summary

This report contains the results of the largest research project into Indigenous fishing values to date, documenting how and why use and management of marine resources is valued by and benefits Indigenous peoples and communities in three very different parts of Australia. The Indigenous Reference Group (IRG) of the Fisheries Research and Development Corporation (FRDC) financed the Native Title Research Unit of the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) to conduct this research, in collaboration with Aboriginal organisations based in three regions:

- the Far West Coast Aboriginal Corporation RNTBC (Far West Coast SA),
- the Crocodile Islands Rangers of the Milingimbi and Outstations Progress Resource Association (Northeast Arnhem Land, NT), and
- the NSW Aboriginal Fishing Rights Group (South Coast NSW)

The research team interviewed 169 Aboriginal people from these three regions between October 2015 and July 2017, collecting qualitative data on the perceived cultural, social, economic and health significance and benefits of customary fishing practices (activities related to the use of fish and aquatic invertebrates). Data was also collected on perceived barriers to customary fishing practices and the aspirations people held for marine resource use and management in their communities' futures.

The results show that for many Aboriginal peoples, customary fishing practices are of immense value and multi-faceted importance; being able or unable to access customary fisheries can have profound repercussions for the cultural, social, economic, physical and mental health of individuals, families and communities. Recognising and facilitating the values and aspirations of Aboriginal peoples in the management and use of their sea countries has the potential to generate substantial positive flow-on effects for overall health, wealth and wellbeing.

Background

Around the world Indigenous peoples see aquatic resource use as part of their identities and crucial to their political, cultural and economic self-determination. Many Aboriginal and Torres Strait Islander peoples continue to seek greater engagement in fisheries and fisheries management in order to meet their cultural and socio-economic needs and long term objectives.

In 2014 the IRG identified Indigenous values in fishing as a key priority area for further research. A refrain heard at national Indigenous forums at the time was that many Aboriginal and Torres Strait Islander peoples felt they were being progressively 'locked out' of their customary fisheries, and that governments, fisheries managers and the general public did not understand why continued access to customary fisheries was so important. This project was developed in response to call for expressions of interest by the IRG for research into these issues.

Objectives

This project had four top-level objectives:

1. Identify cultural, social and economic values of Indigenous fishing at selected case study communities.
2. Articulate connections between established Indigenous land and sea management regimes and Indigenous aspirations in fisheries.
3. Support the recognition of Indigenous values and use of aquatic resources in fisheries management.
4. Build Indigenous and non-Indigenous capacity for collaborative fisheries research and management.

Methodology

AIATSIS and our three regional partners developed and signed comprehensive research agreements which outlined each party's responsibilities. This included AIATSIS hiring and training local Aboriginal people to conduct interviews and analyse the results as part of the research team. The research team, partner organisations and other local informants and experts collaboratively created research instruments for collecting qualitative (and limited quantitative) data on the fishing values, barriers and aspirations of Aboriginal people, tailored to each region's context. These included guides for semi-structured long-form interviews, and short questionnaires where participants indicated how important different reasons for going fishing were to them.

Participants were interviewed individually or in small groups of family, friends or colleagues. Initial participant selection was by recommendation from local partners on the basis of relevant expertise, such as regular fishers, community leaders, Elders, and people known to hold significant cultural and traditional ecological knowledge. From then, selection was mostly via recommendations from previous participants, and members of the research team recruiting attendees at events held by local partners. Where practicable participants were able to choose where they were interviewed; many took place in private homes or out on country.

Key findings

Consistent with previous research, this project found that the Aboriginal people who were interviewed valued fishing and related practices greatly, and for a wide range of reasons. These varied both between and within regions, but general findings that were consistent across all three case study regions included:

- Fishing is governed by widely recognised cultural laws and norms.
- Fishing is one of the primary ways of living and practising culture, maintaining a connection with country and passing on cultural knowledge.
- Sharing catch is a strong norm; often a small number of regular fishers provide for many people.
- Sharing catch strengthens and maintains social ties within and between families and communities.
- Sharing catch creates a social safety net that supports vulnerable members of the community.
- Fishing is an important social and leisure activity.
- Subsistence fishing and the trade and barter of catch increase discretionary incomes by substituting purchased goods.
- Certain marine and coastal species are used medicinally.
- Fishing improves diets, through regular access to healthy foods which are otherwise unavailable or unaffordable.
- Fishing keeps people physically active.
- Fishing helps people to relax and deal with stress.
- Practising culture and providing for their families in this way gives people a sense of pride.
- Fishing is part of people's individual and cultural identities, and thus their sense of self-worth.

The converse of these extensive benefits is that restrictions and barriers to customary fishing practices can have far-reaching negative consequences for the health, wealth and wellbeing of Aboriginal people and communities. The nature and scale of the barriers and restrictions nominated by interviewees varied

considerably between regions, but many stemmed from fisheries management and environmental protection legislation, regulations and enforcement decisions. These included regulations not properly accommodating the unique aspects of Aboriginal ways of fishing (leading in some cases to their effective criminalisation), unfair targeting and harassment of Aboriginal fishers by enforcement officers, inadequate respect for and understanding of the rights of native title holders, and apparent long term declines in local fish stocks attributed to overfishing by commercial operators.

Across all case study regions there was significant interest in greater Aboriginal involvement in commercial fishing, aquaculture and other on-water industries. Jobs created by these industries were seen as highly desirable, because in addition to an income source they potentially entailed working out on sea country, using and passing on cultural knowledge and skills, and reduced the need for people to move off country. Most existing opportunities in commercial fishing and aquaculture were said to be in practice inaccessible to most Aboriginal people. Existing Aboriginal-owned commercial ventures were highly regarded partially because many were seen as directly incorporating local non-economic values. This was also the case for many of the aspirational commercial ventures which interviewees proposed.

Aboriginal people interviewed in all case study regions strongly desired greater involvement in the management of local seas and fisheries. This included at the decision making level, and through more Aboriginal fisheries enforcement officers and Indigenous land and sea management rangers, the latter potentially with enforcement powers.

Implications for relevant stakeholders

These findings indicate that numerous underexplored opportunities may exist for policymakers, fisheries managers and other stakeholders to work with Indigenous communities and peoples to improve their health, wealth and wellbeing through recognising and supporting Indigenous fishing values. In some cases radical restructures to management frameworks may be desirable, and in others significant improvements could be achieved via limited targeted initiatives or small changes to existing programs and regulations. There is also a demonstrated need for continuous re-evaluation of how fisheries management systems interact with Indigenous customary and commercial fishing.

Another important implication of this research is that programs or frameworks which seek to accommodate or promote Indigenous fishing values will likely be fully effective only if Indigenous fishing practices and aspirations can be recognised on their own terms. Attempting to manage a customary fishery as though it were functionally a subset of the recreational sector, for instance, or creating Indigenous-targeted commercial opportunities which do not accommodate non-economic values can lead to suboptimal benefits for impacted communities, and may cause damage and trauma. Any proposed changes to fisheries or environmental management frameworks intended to recognise Indigenous fishing values should as such be developed in consultation with and with the consent of affected communities, using processes that are open, free, prior and informed.

Recommendations

Additional research by or with Indigenous communities, particularly freshwater and Torres Strait Islander, to collate more detailed local fishing values sets and to add to and verify the broad baseline set established here, should be a priority. This would in turn allow research to quantify the total catch and effort of Indigenous fisheries and the estimated monetary value of both economic and non-economic fishing values. Better appreciation of the total value of Indigenous fisheries would inform negotiations over recognition and support for Indigenous fishing values and aspirations in management.

Keywords

Aboriginal, Indigenous, fishing values, customary fishing, cultural fishing, traditional fishing, commercial fishing, fisheries management, natural resource management, Indigenous land and sea management.

Introduction

About this report

The word ‘value’ has different meanings in different contexts, and in this report it is intentionally used for two different but inextricably linked concepts. Within economics, ‘values’ are measures of the benefits provided by something; these values can be economic, such as the potential monetary value of a fisher’s catch if sold or if replaced with an equivalent bought product, or non-economic, including less tangible cultural or social benefits.

‘Values’ can also mean people’s beliefs and worldviews. Some awareness of these kinds of values is necessary for understanding why benefits (especially non-economic benefits) from the same activity can vary from person to person and group to group. That a non-Indigenous fisher would not receive the same cultural benefits from fishing as an Indigenous person fishing on their country may be obvious, but we have to consider their values, in the sense of worldview, to understand why this would be the case.

As such, ‘livelihood values’ or ‘fishing values’ when used in this report cover both of these meanings: ‘values’ are both what participants considered beneficial, and what they considered important. They are conceptually similar to ecosystem services,¹ but broader in scope. They encompass not just the benefits directly provided by coastal and marine resources, but also the benefits derived from the ways in which these resources are harvested and distributed, and some of the beliefs, preferences and worldviews which underlie these.

No attempt has been made to quantify the benefits of fishing or the costs of barriers to fishing to individuals, communities or governments. It is likely that there are ‘hidden’ Indigenous fishing values which were not captured by this research because they were not obvious to participants or not easily recalled.

All references to ‘fishing’, unless otherwise made clear, include fishing as well as the hunting, netting, trapping, gathering, collecting or any other harvest of aquatic animal life, and the activities associated with it. It does not include, however, the hunting of aquatic mammals and reptiles (such as cetaceans, pinnipeds, dugongs, turtles and crocodiles), or the collection of their eggs. While these animals were and are used by many Aboriginal and Torres Strait Islander peoples and continue to be of cultural significance, they were excluded because they are not subject to fisheries legislation and regulations, and out of the three project case study regions regular contemporary use of them only occurs in the Crocodile Islands.²

We have preferred using ‘cultural’ and ‘customary’ to describe the ‘ways of fishing’ conducted by Aboriginal and Torres Strait Islander peoples which are distinct from non-Indigenous recreational and commercial fishing. While ‘traditional’ is used in some jurisdictions – notably in the *Fisheries Management Act 2007 (SA)* – many participants in the research felt that ‘traditional’ implied that

¹ “Ecosystem services are the benefits people obtain from ecosystems. These include provisioning services such as food and water; regulating services such as flood and disease control; cultural services such as spiritual, recreational, and cultural benefits; and supporting services, such as nutrient cycling, that maintain the conditions for life on Earth.” Millennium Ecosystem Assessment, ‘Ecosystems and Their Services’, in *Ecosystems and Human Well-Being: A Framework For Assessment*, Island Press, Washington, 2003, viewed 25 June 2016, <https://millenniumassessment.org/documents/document.300.aspx.pdf>, p. 49.

² For more information on the marine turtle economy of the Crocodile Islands see: B James, ‘Time & tide in the Crocodile Islands: Change and continuity in Yan-nhaŋu marine identity’, PhD thesis, Australian National University, 2009.

practices and values had not changed over time, and at worst that its use was an attempt to restrict how they understood and practised their culture.

While all three case studies in this project were with saltwater groups, we recognise that for freshwater peoples their ways of fishing and their waters are just as valuable to them, and that they have their own unique struggles to secure access to and the health of their customary fisheries. Also, while many of the values, barriers, effects and practices identified in our three case study regions may be common with many other saltwater Indigenous communities, they should not be considered exhaustive or comprehensive.

Background

Harvest and use of aquatic resources is deeply rooted in the identities of Indigenous peoples around the world, who often view these activities as integral to their political, cultural and economic self-determination.³ Many Aboriginal and Torres Strait Islander peoples continue to seek greater engagement in fisheries and fisheries management in order to meet their cultural and socio-economic needs. This includes greater access to commercial fisheries as well as legislative and policy evolution that recognises and supports the enjoyment of the diverse cultural values that Indigenous people hold in fish and fishing activities.

Customary activities are significant in the economies of many contemporary Aboriginal and Torres Strait Islander communities, with wild resources making substantive contributions to diet and livelihoods.^{4,5} Water is of particular cultural significance as an integral part of songs, ceremonies, hunting and collecting, and other activities that bind people to their country and each other, including fishing.⁶ In contrast to European legal traditions which hold seas to be part of the commons and incapable of being owned,⁷ in many Aboriginal and Torres Strait Islander legal systems ownership does not evaporate beyond the high or low water mark. Water, whether salt or fresh, is just as much a part of country as land.

For many Aboriginal and Torres Strait Islander people, their identities, country, culture, spirituality, and systems of knowledge, resource ownership and exchange are inextricably connected.⁸ Many groups proudly identify as ‘saltwater people’ or ‘freshwater people’, depending on the nature of their country. In this context, access to country has been recognised as a determinant of health outcomes in both remote and urban contexts, with evidence suggesting that connection to country strengthens self-esteem, self-worth, pride, cultural and spiritual connections and positive states of wellbeing.⁹ Aboriginal and Torres Strait Islander adults who live on their country are more likely to have no

³ A Ross & K Pickering, ‘The Politics of Reintegrating Australian Aboriginal and American Indian Indigenous Knowledge into Resource Management: The Dynamics of Resource Appropriation and Cultural Revival’, *Human Ecology*, vol. 30, no. 2, 2002, pp. 187–214.

⁴ M Gray, J Altman & others, ‘The economic value of harvesting wild resources to the Indigenous community of the Wallis Lake Catchment, NSW’, *Family Matters*, no. 75, 2006, p. 24.

⁵ J Asafu-Adjaye, ‘Traditional production activities and resource sustainability: The case of indigenous societies in Cape York Peninsula, Australia’, *International Journal of Social Economics*, vol. 23, no. 4/5/6, 1996, pp. 125–135.

⁶ cf. S Toussaint, ‘Fishing for Fish and for Jaminyjarti in Northern Aboriginal Australia’, *Oceania*, vol. 84, no. 1, 2014, pp. 38–51.; S Jackson, ‘Indigenous values and water resource management: A case study from the Northern Territory’, *Australasian Journal of Environmental Management*, vol. 12, no. 3, 2005, pp. 136–146.

⁷ K Glaskin, ‘Limitations to the recognition and protection of native title offshore: The current “accident of history”’, in J Weir (ed.), *Land, Rights, Laws: Issues of Native Title*, vol. 2, no. 5, 2000, p. 5.

⁸ P Anderson, ‘Priorities in Aboriginal health’, in G Robinson (ed.), *Aboriginal health: social and cultural transitions*, Northern Territory University Press, Darwin, 1996, p. 15.

⁹ J Kingsley, M Townsend, C Henderson-Wilson & B Bolam, ‘Developing an Exploratory Framework Linking Australian Aboriginal Peoples’ Connection to Country and Concepts of Wellbeing’, *International Journal of Environmental Research and Public Health*, vol. 10, no. 2, 2013, pp. 678–698.

current long-term health conditions, and were less likely to report having high levels of psychological distress.¹⁰

The colonisation of Australia had and continues to have an immense impact on Aboriginal and Torres Strait Islander peoples and their cultures. Massacres, deaths from introduced diseases, forced dispersal and subsequent policies of protectionism and assimilation all disrupted the strong connection Aboriginal and Torres Strait Islander peoples have with their lands and waters.^{11,12} Driven from country by a combination of force and dwindling food supplies, many Aboriginal groups ended up occupying land close to waterways or coasts on the fringes of European settlement, where access to aquatic resources became even more important to survival.¹³ In some cases colonial governments actively encouraged Aboriginal people to fish, for subsistence and commercially;¹⁴ possibly to reduce the need for Aboriginal people to hunt and gather on land occupied by European settlers.

From the first introduction of state-level fisheries management legislation in the early 20th century, the previously unregulated access Aboriginal customary fishers enjoyed has been progressively restricted, often to the benefit of the predominantly economic interests of non-Indigenous recreational and commercial fishers, governments and corporate actors.¹⁵ Most states and territories have retained or recently introduced some exemptions or protections for Aboriginal customary fishers, but the existence and extent of these has varied wildly depending on the jurisdiction.

Even in states and territories where Aboriginal and Torres Strait Islander peoples have had comparatively unregulated access, until recently they have been largely excluded from fisheries management decisions.¹⁶ The option of partially commercialising customary fisheries to support community and economic development has likewise been largely unavailable, unless pursued on the same basis and through the same channels as non-Indigenous actors. Western scientific and technocratic paradigms have been historically dominant within fisheries management, with Aboriginal and Torres Strait Islander values and systems of knowledge marginalised.¹⁷

Under international law Aboriginal and Torres Strait Islander peoples, as the Indigenous peoples of Australia, have rights to manage, use and benefit from their traditional lands and resources.¹⁸ Under Australian federal, state and territory laws these rights are accorded varying degrees of recognition in

¹⁰ Australian Institute of Health and Welfare, ‘2.14 Indigenous people with access to their traditional lands’, in *Aboriginal and Torres Strait Islander health performance framework 2014 report: detailed analyses*, AIHW, Canberra, 2014, viewed 7 February 2018, https://www.aihw.gov.au/getmedia/e1e55ac8-1a23-40eb-8276-2a2ad5ab4589/02_14_indigenous_people_with_access_to_their_traditional_lands.pdf.aspx

¹¹ B Elder, *Blood on the wattle: Massacres and maltreatment of Aboriginal Australians since 1788*, 3rd edn, New Holland Publishers, Chatswood, NSW, 2003.

¹² Human Rights and Equal Opportunity Commission, *Bringing them home: National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from Their Families*, HREOC, 1997.

¹³ D Byrne & M Nugent, *Mapping Attachment: A spatial approach to Aboriginal post-contact heritage*, Department of Environment and Conservation (NSW), Sydney, 2004, viewed 7 February 2018, <http://www.environment.nsw.gov.au/resources/cultureheritage/04001MapAttach.pdf>

¹⁴ M Bennett, ‘The economics of fishing: sustainable living in colonial New South Wales’, *Aboriginal History*, vol. 31, 2007, pp. 85–102, pp. 93–94.

¹⁵ JM Cantzler, ‘The translation of Indigenous agency and innovation into political and cultural power: The case of Indigenous fishing rights in Australia’, *Interface: a journal for and about social movements*, vol. 5, no. 1, 2013, pp. 69–101.

¹⁶ TJA Hundloe, *Valuing Fisheries: An Economic Framework*, University of Queensland Press, 2002, p. 231.

¹⁷ S Jackson, M Storrs & J Morrison, ‘Recognition of Aboriginal rights, interests and values in river research and management: perspectives from northern Australia’, *Ecological Management & Restoration*, vol. 6, no. 2, 2005, pp. 105–110.

¹⁸ cf. United Nations General Assembly, *Declaration on the Rights of Indigenous Peoples*, A/RES/61/295, New York, 2007; United Nations Conference on Environment and Development, *Convention on Biological Diversity*, Rio de Janeiro, 1992; International Labour Organisation, *Indigenous and Tribal Peoples Convention*, C169, Geneva, 1989.

regards to the use of aquatic resources. While the *Native Title Act 1993* (Cth), the *Aboriginal Land Rights (Northern Territory) Act 1976* (Cth) and other instruments afford some protection of these rights, in many places there is a large gap between how Aboriginal and Torres Strait Islander communities want to use, manage and benefit from their traditional aquatic resources, and what is possible within current state and territory fishing management laws and regulations.

Background information on each case study region is provided at the beginning of the results section for that region.

Need

During discussions at the 2012 National Sea Country Workshop,¹⁹ the 2014 National Native Title Conference²⁰ and similar events, a recurring theme was that many Aboriginal and Torres Strait Islander peoples around the country felt they were being progressively ‘locked out’ of their customary fisheries. In this context, the Indigenous Reference Group (IRG) of the Fisheries Research and Development Corporation (FRDC) identified Indigenous values in fishing as a key priority area for further research, and in 2014 called for expressions of interest from research providers to address it. A successful application by AIATSIS led to this project, with the primary objective of identifying why and how continued access to customary fisheries was valued by Aboriginal and Torres Strait Islander peoples and communities.

Research into the value of fishing to Aboriginal and Torres Strait Islander communities has been relatively limited. Significant early forays, such as the National Recreational and Indigenous Fishing Survey, were often focused more on identifying the size and effort intensity of Indigenous fisheries.²¹ A number of smaller but highly influential place-based studies in the last fifteen years have captured some of the cultural, socio-economic and health values of Aboriginal fisheries, particularly in New South Wales.^{22,23,24} Some of these also captured barriers to customary fishing practices and their impacts, as well as barriers to continued engagement in commercial and cultural-commercial fishing.^{25,26} All these studies pointed to the values of Indigenous fisheries being quantitatively and qualitatively different to those of non-Indigenous commercial and recreational fisheries.

In reviewing the literature there are a few elements which stood out: firstly, the slow pace of legislative recognition of Aboriginal and Torres Strait Islander peoples’ rights to access cultural resources; secondly, the relative dearth of implemented co-management agreements relating to

¹⁹ North Australian Indigenous Land and Sea Management Alliance, *National Sea Country Workshop Report*, NAILSMA Knowledge Series, 014/2013, NAILSMA, Darwin, 2013.

²⁰ D Smyth, R Kennett, T Tran, A Prince-Pike & M Dulfer-Hyams, *Emerging Issues in Land and Sea Management: A workshop to map current and future research and resource needs*, AIATSIS, 2014.

²¹ GW Henry & JM Lyle, *The National Recreational and Indigenous Fishing Survey*, Department of Agriculture, Fisheries and Forestry, Canberra, 2003, viewed 9 November 2015, <http://www.stors.tas.gov.au/au-7-0095-05507>

²² S Schnierer, A Faulkner & C Moran, *A description of the Indigenous fisheries of New South Wales*, Project No. NC0958.98 of the Fisheries Action Program of the Natural Heritage Trust, Indigenous Environmental Research Centre, Southern Cross University, Lismore, 2002.

²³ A English, *The Sea and the Rock Gives Us a Feed: Mapping and managing Gumbaingirr wild resource use places*, NSW National Parks and Wildlife Service, Sydney, 2002.

²⁴ S Schnierer & Fisheries Research & Development Corporation, *Aboriginal fisheries in New South Wales: determining catch, cultural significance of species and traditional fishing knowledge needs*, Fisheries Research Development Corporation, Canberra, 2011.

²⁵ S Schnierer & H Egan, *Impact of management changes on the viability of Indigenous commercial fishers and the flow on effects to their communities: case study in New South Wales*, Report to the Fisheries Research and Development Corporation, 2012.

²⁶ S Schnierer & H Egan, *Indigenous Cultural Fishing and Fisheries Governance*, Final report to the Fisheries Research and Development Corporation, FRDC Project No. 2012/216, Fisheries Research and Development Corporation, 2015.

Aboriginal peoples' rights to aquatic resources; and thirdly, the lack of baseline data or data collected showing qualitative values of customary or cultural catch.

The primary research question of this project seeks to address the third deficit highlighted above. Using mixed methods participatory research both quantitative and qualitative data was collected and analysed to gain insight into the value of access to aquatic resources by Aboriginal communities in three case study regions.

Aboriginal and Torres Strait Islander values in water and fishing have historically been poorly understood by fisheries managers, lawmakers, and the general public. Where they have been recognised at all this has usually been limited to a narrow set of 'cultural values' defined largely in terms of the management of cultural heritage and sacred sites. In such frameworks 'cultural values' as a category has often been perceived as something only pertaining to Aboriginal and Torres Strait Islander peoples, with other values categories like 'social' and 'economic' by extension becoming implicitly 'non-Indigenous'.²⁷ While customary fishing activities are of unique cultural value, compartmentalising them as 'cultural' in this way fails to recognise the full breadth and depth of their continued cultural importance, and that they can equally and simultaneously be of critical social, economic, health or other value to individuals and communities. It denies the complexity of the contemporary relationships Aboriginal and Torres Strait Islander peoples have with their customary fisheries, and reduces the full extent of their distinct interests in them. Establishing a broad baseline data set of values illustrates the importance of rights to access and can inform legislative changes to better support and protect Indigenous fishing values. It also assists communities, governments and other stakeholders to together develop fisheries management regimes which are more equitable and empowering for Aboriginal and Torres Strait Islander peoples.

²⁷ S Jackson, 'Compartmentalising Culture: the articulation and consideration of Indigenous values in water resource management', *Australian Geographer*, vol. 37, no. 1, 2006, pp. 19–31.

Objectives

The project objectives, as listed in the original agreement between AIATSIS and FRDC, were to:

1. Identify cultural, social and economic values of Indigenous fishing at selected case study communities.
2. Articulate connections between established Indigenous land and sea management regimes and Indigenous aspirations in fisheries.
3. Support the recognition of Indigenous values and use of aquatic resources in fisheries management.
4. Build Indigenous and non-Indigenous capacity for collaborative fisheries research and management.

Physical and mental health values were added to the first objective as it became apparent these were also highly significant to case study partners and participants.



Members of the research team and representatives from each case study partner organisation at the National Native Title Conference in Townsville, June 2017. Photographer: Liz Koschel

Methods

Case study partner organisations and regions

AIATSIS negotiated research agreements with three interested Aboriginal organisations, from here known as the case study partner organisations. These organisations were:

- Far West Coast Aboriginal Corporation RNTBC (FWCAC), the Registered Native Title Body Corporate (RNTBC) of the traditional owners of southwest SA
- NSW Aboriginal Fishing Rights Group (AFRG), an unincorporated community group advocating for greater recognition of Aboriginal cultural fishing on the South Coast of NSW
- Crocodile Islands Rangers, an Indigenous land and sea management program of the Milingimbi and Outstations Progress Resource Association (MOPRA)

The case study regions, and their boundaries, were roughly based on the effective areas of operation and influence of each of these organisations. These were:

- the determination area of the Far West Coast native title claim
- the South Coast of NSW, from Bundeena to the Victorian border
- the Crocodile Islands of northeast Arnhem Land, NT

These regions encompass a range of cultural, social, economic and legal environments, including different types of recognition of Aboriginal fishing and land rights. This means that while the results cannot be said to be representative of all Indigenous fishing values, barriers and aspirations across the country, they do capture a diverse spread of contemporary Aboriginal experiences with fishing.

Indigenous research protocols and ethics

This project was designed and conducted with ethical and culturally appropriate protocols for research with Aboriginal and Torres Strait Islander peoples as a central concern. The research methodology was informed by the AIATSIS Guidelines for Ethical Research in Australian Indigenous Studies (GERAIS) and the Code of Ethics of the International Society of Ethnobiology, as examples of national and international best practice.

All aspects of the project were determined collaboratively with our three case study partner organisations. The project design included an initial inception meeting held with each organisation to discuss research questions and priorities and how the case study would run. This included the negotiation of transparent and binding research agreements between AIATSIS and the case study partner organisations.

AIATSIS and the partner organisations collaborated to engage local Aboriginal people as community research project officers in each case study region. The community project officers coordinated participant recruitment, ensured research strategies and instruments were culturally appropriate, and conducted data collection and analysis with the rest of the project team. They also visited the AIATSIS offices in Canberra for research skills training and had access to the AIATSIS collections for their own research projects. In addition to their local knowledge and contacts being boons to the project, the community research project officers were part of a strategy to ensure project benefits were mutual and reciprocal, through direct monetary benefit and building research skills and capacity.

Identification of project participants

The target population for the project was Aboriginal people who lived in or otherwise were connected to the three case study regions, e.g. via family, historical or traditional ownership ties. There was no attempt to discriminate between Aboriginal people who were the traditional owners of a region and those who were not. This was in recognition of the fact that traditional owners and non-traditional owners are often members of the same communities and social groups, sharing social and cultural norms and practices.

Initial participant identification was based on expert sampling, using information provided by case study partner organisations and other local informants. While a broad base of participants with a range of lifestyles and experiences with fishing was sought, there were a number of expert categories that were prioritised as not only likely to provide high quality data, but who also needed to be engaged to meet cultural protocols and community expectations. The expert categories included Elders and community leaders, people with significant cultural and traditional ecological knowledge, current and past commercial fishers, and frequent non-commercial fishers. A single participant was often a member of two or more of these categories.

Collaboration with case study partner organisations and other local organisations and businesses also allowed the extensive use of convenience sampling.²⁸ Project researchers were given speaking time at local events and meetings to introduce the project and ask attendees to participate. Researchers were also given permission to visit workplaces and interview interested employees. Other participants were interviewed after being approached in public areas, such as beaches. Further participant identification was through snowball sampling.²⁹

In all case study regions there was a bias within the samples towards older men. This is possibly due to a combination of greater interest in the research topic among older men compared to other groups, the characteristics of the local expert networks which were initially tapped, some young people believing that Elders should be the ones to represent the community's values, and some women believing that fishing is 'men's business'. Efforts were made to selectively sample women and younger people to compensate.

Data collected

Data, mostly qualitative but some quantitative, was sought from participants on fishing-related values and aspirations, as well as barriers to fishing and their effects. To elicit these, participants were asked questions on a range of relevant topics.

These included:

- Motivations for fishing
- Fishing and connection to country
- Emotional responses to fishing
- Intended use of catch (including sharing, bartering, trading and selling)
- Individual and communal importance and benefits of fishing

²⁸ Drawing a sample on the basis of ease of access to the researchers.

²⁹ The sample grows through current participants suggesting or recruiting potential participants.

- Cultural laws and community rules about fishing and their enforcement
- Experience teaching and learning about fishing
- Barriers to fishing
- Effects of barriers on the individual and community
- Possible solutions for these barriers and effects
- Individual and community aspirations related to fishing and sea country
- Attitudes towards and interest in commercial fishing

Participant responses were recorded in interview notes and, where practical and with the participants' consent, by audio recording. Most participants opted not to have audio recordings of their interviews made. In some cases this was because legally or culturally sensitive issues were discussed, or because participants were concerned about possibly incriminating themselves or others in illegal activity.

Data collection instruments

Two different data collection instruments were used in each case study area: a short questionnaire comprising rating scales, and a longer interview guide with mostly open-ended questions. The longer interview guide also incorporated the short questionnaire, so some participants completed both. In addition to English, in the Crocodile Islands all data collection instruments were also available in the Djambarrpuyŋu dialect of Dhuwal, a Yolŋu language.

Copies of all data collection instruments can be found in **Appendix 2**.

Short rating scale questionnaires

The short questionnaires contained either 17 or 18 items, depending on the case study area. The number of items changed in response to advice from community partners. Each of these items represented a discrete motivation for going fishing or a benefit that might be derived from going fishing.

Participants in South Coast NSW and Far West Coast SA were asked 'How important are the following reasons for fishing?' In the Crocodile Islands this was changed to 'I go fishing because I want to...' (Djambarrpuyŋu: 'Darra ga djältirri guyalil ga maypalil bili...') at the suggestion of our community partners. This was intended to aid participant comprehension.

Participants were asked to rate each item on how important it was to them when they went fishing. Four options of decreasing importance were presented, as well as an option for 'unsure/don't know' placed in the middle. In the Crocodile Islands participants were asked to what degree they agreed or disagreed that each item represented why they go fishing, with options for strongly agree, agree, disagree, strongly disagree, and with 'unsure/don't know' again placed in the middle.

This approach was drawn from the recreational fishing motivation question from the National Recreational and Indigenous Fishing Survey (NRIFS)³⁰. All the items from that question were used in the short questionnaires, and the same five-point rating scale was used. This was a deliberate choice to allow commensurability of results on common items.

³⁰ Henry & Lyle, above n 21.

More than half the items in the short questionnaire were not present in the NRIFS instrument. Some of these items addressed values that were specific to the Aboriginal target population, such as being on country and following cultural laws. Others addressed intended uses for the catch not covered in NRIFS, such as selling, sharing, bartering/trading, and medicinal reasons. Additional items were chosen based on advice from community partners.

The rationale for using the short questionnaire in addition to the long one was so that we had a quick, directly commensurate instrument for gauging individual values, which could be offered to potential participants who did not want to take part in a longer interview. The short questionnaire had the benefits of allowing more people to ‘buy-in’ to the project by being directly consulted and engaged, and collecting general data on values from people who otherwise considered themselves ‘not the right person to talk to’, were uncomfortable with or intimidated by the longer interview process, or did not have time for it.

Longer interview guides

The longer interview guides were designed for face-to-face semi-structured interviews, with both individuals and groups. Group interviews were mostly small (2-6 people), with a preference for ‘affinity mini-group’ interviews of family and friends, as in Schnierer & Egan.³¹ Occasionally interview groups were based on convenience; for example, people attending a community meeting, or the Aboriginal employees of a single workplace. The duration of interviews ranged from about 30 minutes to more than two hours.

The semi-structured interview format was chosen because:

- Follow up questions were essential to exploring values
- A conversational format was thought to be more culturally suitable for participants, in terms of reducing trepidation towards the process, and the interview being about sharing their ‘fishing story’ or ‘yarning about fishing’
- It afforded greater flexibility in lines of questioning, allowing topics to be explored as they arose, rather than according to a rigid interview schedule

A different interview guide was developed for each case study area. The South Coast NSW and Far West Coast SA interview guides were almost identical. There were 28 items in these guides, divided into four sections:

1. *Why is fishing important?*
2. *How important are the following reasons for fishing?* (the short questionnaire)
3. *Sharing, trading, bartering and selling catch*
4. *Rules about fishing*

These questions were designed to act as a ‘funnel’, with the questions moving from general to specific topics. Interviewers were encouraged to pose follow-up questions in order to elicit more information on topics of interest. The only difference between the South Coast NSW and Far West Coast SA interview guides was that question 27 (*What are the rules about different species?*) listed different prompt species.

³¹ Schnierer & Egan, above n 25.

In the Crocodile Islands a smaller array of questions was used on the advice from community members of the project team. Knowledge of responses to the South Coast NSW and Far West Coast SA interviews was used to develop eight questions which, together with targeted follow-up questions, had the potential to elicit views on all the topics of interest while still being tailored to local concerns.

Data analysis

Short questionnaire data

Descriptive statistics drawn from short questionnaire quantitative data were produced using Microsoft Excel. The responses were converted to ordinal data as though each item were a Likert scale, by assigning each a numerical value between 1 (most negative) and 5 (most positive), with the ‘unsure/don’t know’ option assigned the neutral middle value of 3. Modes and medians were calculated for each item, with non-responses excluded from calculations at the item level. Means were not calculated because of their higher sensitivity to a small number of extreme responses, and because it is unclear what a non-integer mean represents and whether it is useful in the context of categorical responses.

The decision to treat ‘unsure/don’t know’ as a neutral category within the scale was based on the interviewers’ perception that respondents largely used it as an indicator of overall neither agreeing nor disagreeing, rather than as an indicator that they did not understand. This was possibly influenced by its placement between the positive and negative responses on the questionnaires. Respondents could and did choose not to respond to specific items.

Longer interview data

Data points were identified from notes and audio recordings taken during the longer interviews. These were transcribed as short sections of text and each assigned one or more codes indicating their thematic content. The researchers developed a hierarchy of codes prior to analysis, based on the research objectives and first impressions of the data provided by participants. These were augmented during the analysis as gaps became apparent.

The top level themes used in this coding hierarchy were:

- **Values**

Why fishing is important to people, why they go fishing, how they go fishing, and its benefits

- **Barriers**

Things that make it harder for people to go fishing, fish the way they want, or achieve fishing-related aspirations.

- **Effects**

The direct and indirect consequences of barriers to fishing

- **Aspirations**

Personal, organisational and community hopes and aspirations related to fishing, aquaculture and sea country management.

Each of these contained a number of more specific subthemes, such as for cultural values, or barriers associated with government actions. The theme and subtheme codes were used to structure the data for comparison and summarising.

Report back and community input

Feedback was sought on the interim findings through ‘report back’ meetings with case study partners. Interested participants and other community members who attended were presented with a summary of the results, and discussed potential additions and corrections with the researchers. The report back meetings were also opportunities for discussion of the extension and adoption of the findings, as is outlined in that section. The report back meeting for the Crocodile Islands occurred in Milngimbi in July 2017, and the South Coast meeting in Central Tilba in December 2017. A community report has been produced and distributed for the Far West Coast case study but to date the research team and FWCAC directors were still trying to find an appropriate time for a formal report back meeting.

Final community reports and the final project report were drafted based on the interim findings and any changes agreed to in the report back meetings. Case study partner organisations had an opportunity to comment on these and provide further additions or corrections before final copies were published.

In addition to this report and the community reports, an [online exhibition](#) was produced and hosted on the AIATSIS website from June 2017, and launched at the National Native Title Conference that year in Townsville. This served as a form of interim report back to participants and partner organisations, providing contextual information and initial findings in plain English, along with relevant images and artwork sourced from participants and the collections of AIATSIS and other institutions. This was also intended as a way to create greater awareness and recognition of Indigenous fishing values among the general public, policymakers and fisheries managers.



Jason Mewala, Vice President of MOPRA, Crocodile Islands Ranger, senior Yan-nhaŋu traditional owner and Aboriginal Coastal Licence holder asking a question at the Yurrwi Fishing Discussion in Milngimbi, 13 June 2017.

Photographer: John Paul Janke.

Results

Short instrument results

In all three case studies, most of the fishing motivations in the short instruments received mode³² and median³³ responses of 5 (very important). Only a handful of motivations in each case study region received mode or median responses of less than 5; these are highlighted in the table below.³⁴

These results confirm that Aboriginal customary fishing, at least in these regions, brings an array of benefits which Aboriginal people, both those who regularly fish and those who do not, are keenly aware of and value highly. Two motivations which received a response of 5, however, might not necessarily be considered equally important; they might both be ‘very important’, but with one still being more important than another.

The only motivations which received median responses of less than 5 across all three case studies were fishing competitions and selling catch. This appears to contradict the enthusiasm for commercial fishing opportunities for local Aboriginal people which were expressed in many of the longer interviews; this is addressed in **Attitudes towards selling catch** in the discussion section. The median and mode scores for selling catch were also much lower on the Far West Coast than the other two case studies.

As this research project was primarily qualitative and focused on identifying detailed information on a wide range of fishing values, barriers and aspirations from often difficult to reach populations, the participant selection process was based primarily on expert, snowball and opportunistic sampling. As such, the short questionnaire was never intended to produce results that were statistically representative. The short questionnaire was used primarily as a tool to efficiently gauge the general values of participants who might not otherwise have had a chance to participate. As such, the short questionnaire results should be taken as supplementary to the qualitative evidence from the longer interviews, and are not generalisable by themselves.

³² The mode is the value that appears most often in a set of responses.

³³ The median is the value separating the lowest 50% of responses from the highest 50% when all responses are ranked from lowest to highest.

³⁴ As this data is ordinal not interval the means are not useful or meaningful as measures of central tendency, so have not been included.

Table 1: Mode and median responses to fishing motivations items on the short questionnaires, by case study region

	South Coast NSW		Far West Coast SA		Crocodile Islands NT	
	Mode	Median	Mode	Median	Mode	Median
Follow cultural rules/law	5	5	5	5	5	5
Teach and pass on knowledge	5	5	5	5	5	5
Learn					5	5
Be on your country	5	5	5	5	5	5
Assert your rights	5	5	5	5		
Food	5	5	5	5	5	5
Medicinal reasons	5	5	5	5	5	5
Share					5	5
Barter/trade	5	5	5	5	5	4
Sell	5	4	1	2	5	3
Be healthy	5	5	5	5	5	5
Be with family	5	5	5	5	5	5
Be with friends	5	5	5	5	5	5
Be alone	5	5	5	5	5	2
Fishing competitions	1	1	1	3	1	1
Sport	1	2	1	3		
Fun					5	5
Relax and unwind	5	5	5	5	5	5
Be outdoors	5	5	5	5	5	5

South Coast NSW: **n = 30**

Far West Coast SA: **n = 26**

Crocodile Islands NT: **n = 21**

5 = Very important, 4 = Important, 3 = Unsure, 2 = Not very important, 1 = Not at all important.

Mode and median responses of less than 5 are highlighted.

Cell is left blank if the item was not present on the short questionnaire used in that case study area. Non-responses and unclear responses were excluded on a per-item basis in the calculation of the modes and medians.

South Coast NSW

Background

What is now called the South Coast of New South Wales is a geo-cultural region encompassing the land and waters east of the Great Dividing Range, roughly bound in the south by the Victorian-NSW border and extending north into the Sydney region. Prior to British colonisation the South Coast was home to a number of different Aboriginal groups. Groups which participants in the South Coast case study identified with included the Brinja-Yuin, Jerrinja, Murramarang, Walbunja, Wandandian, Wodi Wodi and Yuin-Monaro peoples.

During the early 20th century, anthropologist Alfred Howitt claimed that all or most of the groups on the South Coast, especially those on the Far South Coast, comprised a wider socio-linguistic complex usually called the Yuin Nation.³⁵ Not all of those who are purportedly part of the contemporary Yuin Nation agree with this interpretation. It was common at the time of data collection (early 2016) for people to identify themselves as Yuin, either solely or in combination with a more localised label. Regardless, today there are numerous social and family connections linking South Coast Aboriginal communities. The recently submitted South Coast native title claim covers coastal lands and waters from Bundeena south to the Twofold Bay area.³⁶

Evidence for the extensive use of marine resources by South Coast Aboriginal peoples comes from the large number of middens found along the coast.³⁷ Some of these middens continued to be regularly used through the 19th and possibly into the 20th century.³⁸ At some point in the mid-to-late Holocene, perhaps as early as 6,000 years ago, pronged bone-tipped spears were adopted for fishing.³⁹ Shell fish hooks entered the inventory sometime in the last 1,000 years.⁴⁰ In at least some places on the coast, it appears that there was a gendered division of fishing labour, with only men using spears and only women using hook and line.⁴¹ This system would have allowed groups to focus all of their productive efforts on fishing when it was advantageous to do so, while maximising the range of species and habitats which were exploited.⁴²

Contact between Aboriginal people and Europeans (mostly sealers, whalers and shipwreck survivors) was relatively limited on much of the South Coast until the 1830s. European colonists in New South Wales were mainly interested in claiming land for agriculture and grazing, and so avoided the rugged

³⁵ AW Howitt, *The native tribes of south-east Australia*, Macmillan, London, 1904, pp. 81–84.

³⁶ B Brown, ‘Historic meeting of Yuin nation agrees to massive native title claim in south-east New South Wales’, *ABC News*, 23 December 2016, viewed 24 January 2017, <http://www.abc.net.au/news/2016-12-23/yuin-nation-native-title-claim/8145798>

³⁷ B Cruse, L Stewart & S Norman, *Mutton fish: the surviving culture of Aboriginal people and abalone on the south coast of New South Wales*, Aboriginal Studies Press, Canberra, 2005.

³⁸ SM Colley, ‘A Pre- and Post-Contact Aboriginal Shell Midden at Disaster Bay, New South Wales South Coast’, *Australian Archaeology*, vol. 45, no. Dec. 1997, 1997, pp. 1–20.

³⁹ RJ Lampert & PJ Hughes, ‘Sea Level Change and Aboriginal Adaptations in Southern New South Wales’, *Archaeology and Physical Anthropology in Oceania*, vol. 9, no. 3 (Oct. 1974), 1974, pp. 226–235.

⁴⁰ V Attenbrow, ‘Aboriginal fishing in Port Jackson, and the introduction of shell fish-hooks to coastal New South Wales, Australia’, in D Lunney, P Hutchings & D Hochuli (eds), *The Natural History of Sydney*, Royal Zoological Society of NSW, Mosman, NSW, 2010, viewed 30 November 2015, http://www.researchgate.net/profile/Val_Attenbrow/publication/260398641_Aboriginal_fishing_on_Port_Jackson_and_the_introduction_of_shell_fish-hoops_to_coastal_New_South_Wales_Australia/links/5483bd3b0cf2f5dd63a9148d.pdf

⁴¹ I Walters, ‘Fish hooks: Evidence for dual social systems in southeastern Australia?’, *Australian Archaeology*, 1988, pp. 98–114.

⁴² Lampert & Hughes, above n 39.

coast until such opportunities in the more appealing tablelands became limited.⁴³ As the tablelands filled up, the influx of Europeans to the coast began a period of intense territorial conflict lasting through the 1840s, although instances of Aboriginal people being massacred and forcibly relocated continued to occur for decades after.⁴⁴

On the Far South Coast the two focal points of European colonisation were around Moruya and Twofold Bay. These two population centres were largely dependent on fishing and whaling, respectively, for their existence.⁴⁵ Local Aboriginal people, with their extensive cultural knowledge and skills, played a vital role both in the establishment of these industries and the food security of the new communities; in many places Aboriginal fishers came to dominate the local commercial fishing industries.⁴⁶ Commercial fishing became a family occupation for many, passed down through generations, but incorporating customary sharing practices and using cultural knowledge and techniques. This type of fishing continues to be practised by some South Coast Aboriginal families, and is commonly known as ‘cultural-commercial’ fishing.

Aboriginal divers were also the foundation of the first abalone (*Haliotis* spp.) export trade with China that developed in the late 19th century.⁴⁷ The second abalone export trade that took off in the 1960s saw many more non-Indigenous people involved. Severe abalone population declines saw the introduction of a permit system for the fishery; for a number of reasons, most Aboriginal families who until then had made a living from abalone diving were not eligible for permits.⁴⁸

While subsistence fishing by Aboriginal people was in the past exempted from NSW fisheries laws, the introduction of the *Fisheries Management Act 1994* (NSW) and the Jervis Bay and Batemans Marine Parks increasingly restricted customary fishing practices. In 2014, a loose network of Aboriginal people living on the South Coast began to organise against the curtailment of customary fishing practices. Calling themselves the NSW Aboriginal Fishing Rights Group (AFRG), they have organised protests and lobbied governments and researchers for greater recognition of the importance of fishing to South Coast Aboriginal communities and the negative effects of certain fisheries management policies, as well as advocating for greater legal protections for Aboriginal customary fishing in NSW.

⁴³ B Egloff, “‘Sea Long Stretched between’: Perspectives of Aboriginal Fishing on the South Coast of New South Wales in the Light of *Mason v Tritton*”, *Aboriginal History*, vol. 24, 2000, pp. 200–211.

⁴⁴ S Cane, ‘Aboriginal fishing rights on the New South Wales south coast: a court case’, in N Peterson & B Rigsby (eds), *Customary marine tenure in Australia*, Sydney University Press, Sydney, 2014, viewed 16 November 2015, <http://ses.library.usyd.edu.au/handle/2123/11406>

⁴⁵ Egloff, above n 43.

⁴⁶ SB Cameron, ‘An investigation of the history of the Aborigines of the far south coast of New South Wales in the nineteenth century’, B Litt (Honours), Australian National University, Canberra, 1987.

⁴⁷ Cruse et al., above n 37.

⁴⁸ Ibid.

Values

Cultural values

Participants in nearly all the South Coast interviews talked about how important fishing is to their culture. As saltwater people, all of the knowledge and practices related to marine foods are central to their culture, and part of what makes it unique. This means that fishing and gathering other seafood is one of the main ways people practice their culture. It's also about getting out on country, and feeling connected to country and ancestors by fishing and gathering the way they did.

Most participants talked about the cultural laws and rules that they follow when they go fishing. Most learnt these from their older relatives, and were often about making sure their take is sustainable. Some of these cultural laws were similar everywhere, and included:

- only taking as much as you need
- not taking any individuals that are too small or too large
- taking species in their season
- making sure you don't overfish or 'clean out' an area

Not taking large individuals applied to a number of species, like abalone, lobsters and some finfish. Partly this is out of respect for the fact that many species can take years or decades to grow to a large size. A number of participants said they were taught that large individuals were 'breeders', and that it is important to leave them to help maintain stocks.

People know when different species are coming into season from environmental cues. One of the most commonly mentioned was that the flowering of certain plants indicated the beginning of the seasons for different finfish species. For instance, the flowering of bloodwoods (*Corymbia gummifera*) in late February or early March heralds the imminent annual mullet run, where mullet (*Mugil cephalus*) emerge from estuaries and migrate north following the coast. The flowering of a number of different wattles (*Acacia* spp.) in late July and August likewise indicates that snapper (*Pagrus auratus*) will soon be plentiful. There were numerous other environmental cues which people used to identify when and where to fish on a more day-to-day basis, including the tides, winds and weather.

Participants said that most people follow these laws. If they don't, they might face opprobrium from the community in general, and Elders in particular. Even the cultural-commercial fishers follow some of these laws; they generally only target a species, like mullet, when it is running, not all year round.

Because of all of this, taking children fishing is necessary for their cultural education. Through fishing they learn cultural knowledge of local fauna and flora, different fishing techniques and practices, knowledge of their country and the right places to get different species – as well as the stories of those places. They also learn the cultural laws that govern fishing. For families with histories of cultural-commercial fishing, getting their children involved is also important as it means passing on family traditions.

Social values

There are a number of different aspects which make fishing an inherently social and pro-social activity for Aboriginal people on the South Coast. Many participants said they almost invariably went fishing with other people; usually family and friends. Fishing is valued as a positive way of spending time with others that contributes to family and community solidarity.

Even if someone goes fishing by themselves, they are never fishing just for themselves. Of course people go fishing to feed their own children and partners, but they also share their catch with their siblings, parents, grandparents, aunties and uncles, cousins, neighbours, friends, and sometimes even complete strangers. Sharing is one of the core values of fishing; if you catch more than you need, you're expected to share.

This sharing creates a social safety net that supports vulnerable people within the community. Extra catch almost invariably is shared with Elders first, and then to other people who can't fish for themselves, like those with chronic illnesses. People also look out for families with low incomes or who have a lot of children.

It also helps keep families and communities cohesive and strong. Sharing with someone else means that, if they can, they will share with you down the track, and this helps people maintain social ties. For large gatherings which bring all the family or community together, including for events like funerals, a small number of fishers will catch enough to feed everyone.

Likewise, cultural-commercial fishing doesn't just involve the fishers themselves. Dozens of people come down to help the beach haul fishers pull their nets in, and these days become significant community events. Those who help the fishers are given some of the catch, and more is often shared through the community. So, generally the cultural-commercial fishers will only sell a portion of their total catch.



A combined community gathering and Aboriginal fishing rights protest, October 2014. Photographer: Wally Stewart.

Economic values

Fishing has always been an economic activity for South Coast Aboriginal people. In the interviews people told us about how fishing continues to be an important livelihood for their communities.

Whatever other benefits might come from it, in the end fishing was about subsistence. Being able to feed themselves and their families from the sea was of huge economic importance to many participants. Many Aboriginal people on the South Coast are unemployed, underemployed or have low incomes, and substituting self-caught or shared seafood for bought food is of immense economic value.

Some participants talked about how they barter or trade some of their catch. Many older participants said they used to do it when they were younger. This could be trading for part of someone else's catch, trading for other kinds of food (like vegetables), or trading it for other goods or services (everything from tyres, to beer, to a lift to the next town). While in the past it was apparently ubiquitous, and something both Aboriginal and non-Aboriginal people engaged in, today it appears to be much less common. This could be due to the fact that bartering or trading catch is considered 'commercial gain' under NSW fishing regulations, and so requires a commercial licence.

Nevertheless, bartering and trading were seen as important by a lot of participants because it can make life easier for people who are struggling financially. A number of people also believed it was important to be able to barter and trade because it is part of their culture: they talked about the historical trade of coastal foods to inland groups, and how barter and trade as it's done now evolved from those traditions.

Aside from the licensed commercial fishers, the vast majority of participants said they did not sell their catch, or did so very infrequently. Some participants said they sometimes sold some of their catch to local individuals or businesses, and many more of the older participants said that they used to do this in the past.

Regardless of whether they still do or used to sell their catch, many participants identified being able to do so as of high importance. Reasons for this included that:

- it would help people on low or no incomes
- it could provide economic opportunities
- selling, just like trade/barter, is part of cultural fishing
- the traditional owners of the marine resources have a right to use and manage them as they see fit, including selling

Some participants thought all South Coast Aboriginal people should be able to sell some of their catch without a commercial licence, within reason. Others thought it should be managed at the local level, with communities or families deciding amongst themselves who should be allowed to sell. Still others said that only the families who have histories of cultural-commercial fishing should be allowed to sell their catch without a licence.

There were also participants who didn't think that being able to sell catch was important. Mostly they believed that cultural fishing and commercial fishing were separate, and that it should be kept that way. They emphasised that for them cultural fishing was about providing a meal for yourself and your family, not about making money.

The short questionnaire results confirm that opinions differed more on selling catch than for most of the other motivations for fishing.

Regardless of their opinion on whether cultural fishing could include selling, more jobs and business opportunities in the commercial fishing sector were of great interest to most participants. This was also true of other water-related industries like aquaculture, cultural tourism and land and sea management. This was because it was believed that these industries could provide jobs that:

- are local, meaning people don't have to leave their families and country to find work
- could involve using cultural knowledge and skills
- are about making a living managing and using their marine resources



Cultural-commercial fishers from the Jessop family beach hauling mullet, Mullumburra Point, NSW, May 2013.
Photographer: Wally Stewart.

Health values

In terms of physical health, the most mentioned benefit of cultural fishing was access to healthy food. Seafood of all kinds was seen as an important part of a healthy diet, and many people wouldn't be able to eat seafood as often if they had to buy it due to the cost. A number of participants talked about how as saltwater people they needed seafood to feel healthy, as it was what they had grown up on.

The physical activity associated with going fishing, and especially diving, was also widely mentioned as a benefit. This was particularly important for older people; some participants mentioned that when their older relatives were no longer able to go fishing and diving, their health began to deteriorate faster.

There was a specific group of problems that some participants claimed were associated with eating less seafood and no longer getting the associated exercise. Hypertension seemed to be the most common, and thyroid issues, diabetes and high cholesterol were also mentioned.

A number of participants noted that some species were also used as Aboriginal medicines and remedies. One example was that bimbillas (Sydney cockles, *Anadara trapezia*) can be used to control high blood pressure.

Many participants were keen to have on record the importance of cultural fishing to their mental health as well. Some said they felt there were cultural and social expectations for them to provide food for their families by hunting, fishing and gathering. Feeding their families through fishing, as their ancestors did, gave them a great deal of pride and self-esteem.

Using cultural fishing to temporarily escape or deal with daily stress and anxiety was widely mentioned. Participants talked about time spent fishing by themselves or with family as 'therapeutic', 'healing', 'relaxing', 'peaceful', a 'spiritual journey', and 'time to think' that 'keeps me sane'. A number said that they wouldn't know what to do if they could no longer go fishing; that they would lose part of themselves and their identity, and it would be akin to losing a limb.

Barriers and effects

Fisheries management and enforcement

Many participants said that the interim bag limits for Aboriginal fishers were still too small, especially if someone was regularly fishing to feed a large number of people. This left fishers vulnerable to prosecution by NSW Fisheries if they continued to conduct their cultural fishing to fulfil those cultural and social obligations.

Fines worth thousands of dollars and imprisonment as a result of these prosecutions can ruin the economic prospects of individuals and families. Vital assets such as cars are often confiscated in order to pay these fines. Imprisonment removes one of the breadwinners from the household, and having a criminal record can eliminate that person's chance of getting a job when they are released.

This can lead to a vicious cycle of criminalisation, where Aboriginal people fishing or diving in order to feed their family receive a criminal conviction and become unemployable, and so have few options but to fish or dive in order to sell. Imprisonment of a parent also has numerous social and mental health effects on children, partners, and extended family.

More broadly, the people who are fishing to feed many others, and so most likely to face prosecution, are often community leaders. They are depended upon in a range of contexts and support the whole community. When they are imprisoned, it can lead to wider community dysfunction and trauma. Participants noted that this can include increases in anti-social behaviour, domestic violence, and abuse of alcohol and other drugs.

Court orders for fishing-related matters can also specifically prevent people from continuing cultural fishing practices, such as prohibitions on entering coastal waters. Even cultural fishers who deliberately stay within fisheries management regulations say they are sometimes dissuaded from fishing, as they feel they are racially profiled by Fisheries officers.

The result is that people are less likely to go fishing, and communities have reduced access to the benefits of cultural fishing outlined above. Beyond that, cultural fishers feel a sense of shame and their self-worth is eroded, as they feel they aren't living up to cultural and social expectations.

It also means people are less likely to take their children fishing. Children then don't get a chance to learn a lot of cultural knowledge, and parents feel ashamed and that they are letting their children and Elders down by not fully passing on their culture. For cultural-commercial fishers there is a further level to this; under law anyone who helps them fish in any capacity must hold their own commercial licence or risk prosecution. This has made it harder for them to pass their knowledge and livelihood on to their children.

Access barriers

Many participants noted that they were either partially or fully restricted from using significant sites for cultural fishing. The two main reasons for this were Marine Park zoning, or because the sites, while themselves not legally owned, were only accessible by travelling through private property.

In either case, sites that are of general cultural significance, or significance to particular families, can no longer be used for fishing as they had been. Continued use of these sites for cultural fishing risks violating Marine Park zoning regulations or conviction with trespassing, if the landowner does not provide consent to cross their land.

Some participants noted that specific places that were used to teach children about fishing and other cultural knowledge have been affected by this. They claimed this had affected the passing down of cultural knowledge.

A number of participants felt that the zoning within the Batemans Marine Park forced all recreational and cultural fishers into a few small areas, resulting in those areas being over exploited. This has made it harder for cultural fishers to catch enough for their needs.

Many participants were particularly distressed by the Marine Park zoning because they believed they had been taken advantage of, and their knowledge and goodwill used against them. They said that prior to the establishment of the Batemans Marine Park many South Coast Aboriginal people were asked to provide information on things like the areas they fished and where they went to catch different species.

People believed this was to ensure their cultural fishing would be accommodated within the zoning. Participants said that many of the places that they regularly fished were instead placed in sanctuary and habitat protection zones.

Outside perceptions

Participants said that representatives of the commercial abalone industry and NSW Government agencies like DPI had for decades characterised Aboriginal fishers who exceed bag limits, especially in the closed abalone fishery, as ‘poachers’ who are motivated purely by financial gain and pose a threat to the sustainability of fisheries. There are certainly individuals, both Aboriginal and not, who have been convicted of illegally taking hundreds or thousands of abalone and other high value species in order to sell them on the black market.

This language had spread throughout much of the non-Indigenous community on the South Coast, as well as being picked up by the print media. This has reportedly developed into a discourse that labels Aboriginal fishers and divers as ‘rapists of the ocean’ who unscrupulously overexploit vulnerable species and ecosystems for individual profit. In response to this narrative, one participant rhetorically asked why he was still broke, given the large numbers of abalone he is supposedly selling.

According to the majority of participants, most Aboriginal people who have received legal penalties related to fishing were guilty of exceeding bag limits in the course of genuine cultural fishing, but commonly any Aboriginal fishing that breaches DPI regulations is stereotyped as ‘poaching’. A director of the Abalone Council of Australia has dismissed cultural fishing as ‘a front to market huge quantities into the illegal market’. The Abalone Association of NSW has likewise claimed that cultural catch is ‘being used as a guise for a complex criminal syndicate’.⁴⁹

Regardless of whether there has actually been intent to characterise all cultural fishing as poaching, this has been a consequence. A number of participants said they had been verbally abused by non-Indigenous people when they went fishing or diving. Another common complaint was that some non-Indigenous people would call Fisheries officers whenever they saw Aboriginal people near the water.

Harassment from Fisheries officers and the general public reportedly deterred some people from fishing. A few participants said that while they would rather not, they now go fishing or diving at night so as to avoid this. It also creates feelings of shame and anger in many South Coast Aboriginal people, as their culture is criminalised and becomes something to hide and to practice in secret, not to be proud of. Some also said they feel stressed and fearful when they do go fishing as a result.

Some begin to internalise this view of themselves as ‘poachers’ and ‘criminals’, with predictable negative effects on self-esteem and mental health. According to a few participants, talking about and treating cultural fishers as though they were ‘poachers’ can push them into actually becoming poachers. Cultural fishers, particularly those who fish for a lot of other people and so regularly have to

⁴⁹ K Lockley, ‘Cultural fishing a “front” to cover up commercial poaching: Abalone Council’, *Narooma News*, 9 February 2017, viewed 5 March 2017, <http://www.naroomanewsonline.com.au/story/4456507/cultural-fishing-a-front-to-cover-up-commercial-poaching-abalone-council/>

exceed bag limits, were described as facing a stark choice: stop practising elements of your culture and abandon important cultural and social obligations, or accept being labelled a ‘poacher’ and ‘criminal’ and the near certainty that at some point you will suffer the legal consequences. If by choosing the second option you are going to be labelled a ‘poacher’ and penalised, regardless of whether you actually intend to illegally sell abalone or not, then poaching becomes a rational course of action; that way you also get the benefits of being a ‘poacher’, and not just the disadvantages.

Lack of agency

There was a broad belief that the voices of South Coast Aboriginal people on fisheries management matters were not being heard. Many participants felt that there was little genuine consultation, and where people do get an opportunity to share their views they appear to be misunderstood or ignored.

This frustrated many, not just because they felt powerless, but also because they felt that the people writing regulations didn’t understand the impacts of their decisions. As the traditional owners of the South Coast’s marine resources many participants believed they should be included in all decisions.

Many participants felt that cultural fishers were needlessly overregulated. To them it seemed hypocritical for Fisheries to focus on the compliance of the small number of cultural fishers, and for them to be characterised as threats to the marine environment, when their total take pales in comparison to that of the commercial fisheries. At the time of the interviews the factory trawler *Geelong Star* was present in South Coast waters, and it and the commercial abalone fishery were the most cited examples of commercial take that was considered unsustainable.

A number of participants believed that cultural fishers were used as scapegoats for sustainability issues, while the practices and total takes of commercial fisheries were rarely publically discussed. In their eyes this indicated that fisheries management and enforcement was more concerned with politics and protecting certain interests than equity or sustainability, or even, as a few claimed, that there was an element of corruption involved in the decisions being made. Some complained about the severe penalties for cultural fishers who exceed bag limits or take undersize abalone compared to the ‘slap on the wrist’ which they believed commercial operators who breach their licence conditions get.

All of the above meant that for some participants there was a combined sense of fisheries being overexploited and the worst offenders not being held to account, while cultural fishers were strictly regulated, harshly penalised and scapegoated. One participant explained that this led some people to no longer follow the cultural laws around fishing. Those laws are intended to keep fishing sustainable; but if you feel like you are the only one who is being forced to fish sustainably, it seems pointless and you come to resent any constraints.

Economic barriers

Entry into the commercial fishing sector is out of most people’s reach. Leaving aside costs around gear and boats, shares in most commercial fisheries by themselves are prohibitively expensive. Low incomes also mean starting their own businesses in other on-water industries – without assistance – is difficult for many people on the South Coast to imagine.

A few participants claimed that records relating to commercial licences held by some Aboriginal commercial abalone divers were lost by the NSW Department of Primary Industries (DPI). This reportedly resulted in them being ineligible for licences or shares when the fishery was changed to share-based management.

The increasing prices of fisheries shares and licences have led to fears that cultural-commercial fishing will eventually die out on the South Coast. Two of the cultural-commercial fishers can no longer afford to pay their licence renewals. They are now arguing that, having never ceded their sovereignty, they have a right to take and use their marine resources as they see fit, without the need to have shares or licences.

Aspirations

In the interviews participants identified a number of fishing related aspirations. These included:

- The establishment of one or more Aboriginal fishing co-operatives
- Commercial fishing quotas given to each family or Local Aboriginal Land Council (LALC)
- More fisheries shares and commercial licences made available to Aboriginal people
- More Aboriginal-owned aquaculture ventures, including abalone ranching
- More funding for secure jobs in land and sea management for young Aboriginal people, whether this is through LALCs, National Parks, Marine Parks, Fisheries, or independent ranger groups

At the South Coast Aboriginal Fishing Rights Summit in December 2017, discussion of the findings of the case study and other issues led those present to issue a number of statements and recommendations. These included:

- That South Coast Aboriginal culture is not static; it has and will continue to evolve and change, as all cultures do
- That the enormous positive contribution of cultural-commercial fishers to their communities be recognised
- That the role of women as cultural fishers and food providers also be recognised
- That the NSW Government and Fisheries recognise that the South Coast Aboriginal peoples are the traditional owners of the lands, seas and resources of the South Coast
- That the native title rights and interests, including cultural and fishing rights, of South Coast Aboriginal peoples be recognised by the NSW Government in legislation and in its actions
- That the NSW Government enact Section 21AA of the *Fisheries Management Amendment Act 2009* (NSW) without regulation of Aboriginal cultural fishers
- That South Coast Aboriginal peoples be allowed to manage their own fisheries, independently of NSW Fisheries and NSW Marine Parks
- That more commercial abalone fishery shares be made available to Aboriginal people
- That commercial abalone and lobster divers be prevented from using hookah systems and boats, in order to make the fishery more sustainable
- That an Indigenous ranger program with at least 10 rangers be set up for land and sea management and culturally appropriate fisheries enforcement

Far West Coast SA

Background

The region known as the Far West Coast of South Australia is a vast arid and semi-arid region stretching west from the Eyre Peninsula to the Western Australian border, with the Great Australian Bight to the south. The west is dominated by the Nullarbor Plain. In the east the coast is a mix of sandy beaches, sheltered bays and rocky shorelines. The twin towns of Ceduna-Thevenard are by far the largest centre in the region. Major Aboriginal communities include Koonibba, Scotdesco, Yalata and Oak Valley, as well as numerous smaller settlements known as ‘urban homelands’ in Ceduna’s surrounds.

The recognised native title holders of the land are from the Wirangu people, the Mirning people, the Yalata people, the Maralinga Tjarutja or Oak Valley people, the Kokatha people and the descendants of Edward Roberts. In their determination of native title in 2013 they were found to constitute a single society comprising distinct cultural and linguistic groups.⁵⁰

According to Tindale, two different groups had their traditional lands on the coast: the Mirning in the west and the Wirangu in the east, with the lands of the Kokatha people inland from those of the Wirangu.⁵¹ The Yalata and Maralinga Tjarutja groups are Anangu peoples who were forcibly removed from their lands in the northern deserts closer to the coast prior to the British nuclear weapons tests at Emu Field and Maralinga.⁵²

While delineation between ‘coastal’ and ‘desert’ peoples is somewhat useful for understanding broad traditional cultural patterns on the Far West Coast, it belies the long history of cultural, social and economic exchange between them.⁵³ Cultures and identities in the region have also changed over time with the population movements which followed colonisation. As such, today some families who identify with groups that ethnographers have labelled as traditionally ‘desert’ peoples still have deep connections to and extensive ecological knowledge of the coast. Many family groups claim descent from both ‘coastal’ and ‘desert’ peoples.

Archaeological evidence in the form of middens shows the harvesting of a range of marine gastropods, which may have been traded and ceremonially exchanged with inland groups.⁵⁴ Oral history and archaeological evidence also points to the widespread use of naturally-occurring and constructed fish traps into the 19th and 20th centuries.⁵⁵

The permanent European presence in the region began in the 1850s with the establishment of pastoral stations. Agriculture began to replace pastoralism in the region in the 1890s. This more intensive use of land severely disrupted Aboriginal economic and cultural activities, forcing many Aboriginal people into the European stations, settlements and missions more or less permanently in order to avoid

⁵⁰ *Far West Coast Native Title Claim v State of South Australia (No 7)* [2013] FCA 1285.

⁵¹ N Tindale, *Aboriginal Tribes of Australia: Their Terrain, Environmental Controls, Distribution, Limits, and Proper Names*, Australian National University Press, Canberra, 1974.

⁵² M Brady, ‘The politics of space and mobility: Controlling the Ooldea/Yalata Aborigines, 1952–1982’, *Aboriginal History*, vol. 23, 1999, pp. 1–14.

⁵³ P Monaghan, ‘Authenticity, Ideology and Early Ethnography - Untangling Far West Coast Gugada’, in *Warra wittaniappendi: Strengthening languages - Proceedings of the inaugural Indigenous Languages Conference (ILC) 2007*, University of Adelaide, Adelaide, 2008, pp. 113–118, viewed 23 May 2016, <http://www.atsida.edu.au/sites/www.atsida.edu.au/files/Monaghan%202007.pdf>

⁵⁴ AF Nicholson, ‘Archaeology on an Arid Coast: Environmental and cultural influences on subsistence economies on the West Coast of South Australia’, Master of Arts thesis, Australian National University, Canberra, 1994.

⁵⁵ S Martin, *Eyre Peninsula and West Coast Aboriginal Fish Trap Survey*, Prepared for the South Australian Department of the Environment and Planning, 1988.

starvation.⁵⁶ Fishing trips to the coast became an important way of maintaining cultural practices for families living at the Koonibba mission.⁵⁷

The end of the mission at Koonibba in 1963 led to many residents moving to Ceduna and other towns in search of work, where they regularly encountered discrimination in employment, housing and education.⁵⁸ The high unemployment rate of Aboriginal residents of the Far West Coast later came to the attention of the United Nations Association of Australia, which suggested relaxing South Australian fisheries regulations to allow more Aboriginal people to get commercial licences.⁵⁹

In 1993, a local Indigenous training and employment organisation entered into a joint venture with a local non-Indigenous family business to develop a ten hectare oyster lease in Ceduna. In addition to the additional funding stream to reinvest into the community, this venture also provided a program to employ and train local Aboriginal people.⁶⁰ It has since reverted to fully non-Indigenous ownership.

Far West Coast Aboriginal Corporation (FWCAC) is the Registered Native Title Body Corporate (RNTBC, also known as a Prescribed Body Corporate or PBC) for the native title holders of the Far West Coast. As a PBC, FWCAC has a responsibility to represent its members and their interests in a wide range of fields. These include land and sea management, heritage issues, negotiating land use and mining agreements, local governance, and, of course, anything that may affect their native title rights and interests.

FWCAC has focused on leveraging native title to create sustainable economic development outcomes for its members. The Far West Coast Sea Claim was lodged in early 2016 and passed the test for registration with the National Native Title Tribunal later that year. The claim seeks recognition of the native title rights and interests of Far West Coast Aboriginal people over waters adjacent to their land up to three nautical miles from the low water mark.

⁵⁶ P Brock, ‘Koonibba, a Refuge for West Coast People’, in *Outback Ghettos: Aborigines, Institutionalisation and Survival*, Cambridge University Press, 1993, pp. 63–66.

⁵⁷ E Vincent, ‘The making of “mission mob”: Koonibba Lutheran Mission as a site of memory’, *Journal of the Anthropological Society of South Australia*, vol. 37, no. December 2013, 2013, pp. 31–56.

⁵⁸ P Brook, ‘Aboriginal agency, institutionalisation and survival’, PhD thesis, University of Adelaide, 1991.

⁵⁹ United Nations Association of Australia, *Report of a visit to Ceduna, Yalata and Koonibba*, Melbourne, 1978.

⁶⁰ Aboriginal and Torres Strait Islander Commercial Development Corporation, *Investment Portfolio Introduction: Ceduna Clearwater Oysters Joint Venture, Ceduna South Australia*, 1994.

Values

Cultural values

For nearly everyone we interviewed, fishing was something that is of deep cultural importance. To them fishing was a chance for people to practice their culture and feel connected to their country and ancestors. Many people felt that fishing was central to their identity; this could be because they saw themselves as members of a coastal or saltwater group, because they had grown up fishing, because it was their livelihood, or any combination of these.

There are many people with cultural and historical connections to the Far West Coast who don't live there most of the time. This is particularly true for many young people, who have moved to other towns in regional South Australia (like Port Lincoln and Port Augusta) or to Adelaide for work or study. For them being able to go fishing when they return is an important way to reconnect with their culture and country.

A lot of people talked about the cultural laws and rules that they follow when they go fishing. Most learnt these from their older relatives. Some of these cultural rules were shared by most people who were interviewed, and included:

- Only taking what you need
- Not taking anything that's too small
- Taking species when they are in season
- Making sure you don't overfish or clean out the spots you visit

There were a number of rules that weren't talked about as often in the interviews but many people still said they followed. These were:

- Not taking the largest ones of some species (like abalone) because they are 'breeders'
- Not taking crabs that are 'berried' (have external eggs), or any female crabs
- Not taking finfish that look pregnant

People know when different species are coming into season from changes in the environment and the time of the year. Some people mentioned that cues for what species would soon come into season came from what they could hunt on land.

Many participants said that most Aboriginal people in their communities follow these laws. Ignoring them can mean getting in trouble with your family and Elders.

Because of all of this, taking kids fishing is necessary for their cultural education. Through fishing they learn cultural knowledge of local fauna and flora, different fishing techniques and practices, knowledge of their country and the right places to get different species (and the stories of those places). They also learn the cultural laws that govern fishing.

Social values

Fishing for Far West Coast Aboriginal people is always a social activity, in one way or another. People will take their kids fishing, or go out with other family or with friends. It is valued as a positive and healthy way of spending time with loved ones.

Almost everyone we interviewed talked about how much they appreciated being able to go out fishing with their family. Going out fishing was an activity that adults and kids could enjoy together, which made it an important bonding activity for many families. Especially for the many families that were separated by distance, going fishing together when everyone comes back to the Far West Coast was something that helped keep them connected.

Even if someone goes fishing by themselves, they are never fishing just for themselves. Sharing is one of the core values of fishing; if you catch more than you need, you're expected to share.

People told us their extra catch usually goes to their Elders first. Older people often ask their younger relatives to get them certain wanna ma (coastal foods) next time they go. People also said they shared a lot with their extended family, even when some of them lived hundreds of kilometres away.

For many people this sharing was about looking after everyone, and making sure people who can't go fishing for themselves still get a feed. This is why extra catch goes to Elders first. Many people also said they make a special effort to get wanna ma for their other relatives or friends who can't or don't have time to do it themselves, or who are struggling financially.

All of this sharing creates a social safety net that supports people who are vulnerable or having a tough time. It also brings and keeps families and communities together, because sharing back and forth helps build new connections and strengthen old ones.

A lot of people talked about the value of fishing as a pastime or recreational activity, too. The Far West Coast is very remote, and a few people noted that even in Ceduna there wasn't much to do, especially for young people. Fishing is something that nearly everyone can enjoy and it gets people outdoors and active. For these reasons a lot of people also said it was a positive thing for kids to do, and that their kids would be bored if they couldn't fish.



Kids fishing for salmon at Point Vivon, SA, May 2017. Photographer: Charles Charles.

Economic values

While there are plenty of other benefits that come from it, in the end people go fishing to provide for their family. For the Far West Coast Aboriginal people we interviewed, most of the time this meant getting wanna ma to eat.

Subsistence fishing was something that most people said they either did, or someone else did for them (see the previous section about social values). Even if wanna ma isn't sold or traded, it can still have economic value. This is because individuals and families that get their own wanna ma to eat can spend less money on food.

This means subsistence fishing is particularly useful to people who are unemployed or have low incomes. For many people, catching their own wanna ma was one of their main food sources. Many kinds of commonly eaten wanna ma, like King George whiting (*Sillaginodes punctatus*) and galda maru (blue swimmer crab, *Portunus armatus*), were too expensive for most to afford to buy regularly. Others, like moona ma (giant limpets, *Scutellastra laticostata*) and razor fish (common razor clam, *Pinna bicolor*), aren't sold commercially.

Lots of people talked about how they trade their wanna ma sometimes. Usually this was swapping for another kind of food, often for a different species of wanna ma or for bush meats like kangaroo, wombat and rabbit. One family said that they send wanna ma to their relatives in Adelaide who can't go fishing as easily, who then send fresh vegetables back, as they are cheaper there. Some people didn't think this kind of swapping for different foods should be called 'trading' and said it was just sharing. A handful of people said they sometimes traded wanna ma they caught for things other than food, like help with yard work.

Only one person told us that they had ever sold wanna ma they had caught without a commercial licence. A few people told us that there were some Aboriginal people who had started collecting lots of razor fish and selling them around Ceduna, but most of them were visiting from other places like Coober Pedy. They thought this was because of the introduction of income management for welfare recipients; selling razor fish was a way for people to get some cash.

Most people we interviewed didn't seem to like the idea of selling catch without a licence, either because they thought it should just be about subsistence and sharing, or because they thought if it were legal some people would abuse it. There was, however, a smaller group who thought it could be a good thing. Whether people should be allowed to sell catch that's left over after all the family has got some, maybe through an Aboriginal fishing cooperative, was discussed in a couple of interviews.

Regardless of what they thought of selling catch without needing a commercial licence, many participants wanted more job opportunities for local Aboriginal people in commercial fishing and aquaculture. This was also true of other water-related industries like cultural tourism and land and sea management. This was because people believed these industries could provide jobs that:

- are local, meaning people don't have to leave their family and country to find work;
- could involve using cultural knowledge and skills; and
- are about making a living by managing and using their marine resources.

Health values

The physical and mental health benefits of wanna ma and going fishing were something that people talked about in nearly all the interviews.

Getting your own wanna ma was more affordable for people than buying it, and many said that if they couldn't fish anymore their families' diets would suffer. This would affect the health of their Elders the most. Some said that they needed local, fresh wanna ma in their diet because they were saltwater people, and they had grown up eating it.

Many people also mentioned that going to get wanna ma was important for good health because of all the exercise that comes with it. Some worried that not being able to go fishing affected people's fitness.

Some people also told us that different types of wanna ma are used as medicines or help prevent different chronic diseases. This was another reason why it was important for people to be able to get wanna ma for their Elders.

The importance of fishing to Far West Coast Aboriginal people's mental health was talked about a lot. Going fishing can be good fun, and it helps them to relax and deal with stress, and gives them time to think.

A major way that it can affect mental health is through the importance of wanna ma and fishing to culture and social norms. Some people said that fishing was sacred to them, and through practising their culture and getting out on country they felt more fulfilled. When people are having mental health issues, sometimes family or community leaders take them out of town for some time so they can get back to country and reconnect with culture; fishing is used for mental healing in this way.

Many people mentioned that being able to practice their culture and provide wanna ma for their families like their ancestors did made them feel proud. Some said that not being able to do this would make them feel ashamed and sad, because they wouldn't be living up to cultural and social expectations.

Kids need to be taught how to fish so that culture will be passed down, but they also need to learn the proper way to do things so that they can stay safe and healthy. Many people said that these things were some of the most important for kids to learn about fishing. This includes learning all the cultural knowledge of the different species that can be found on the Far West Coast. Kids need to know which ones are dangerous or poisonous, and which ones are good to eat. For the ones you can eat, kids need to learn where to find them, how to get them safely, and how to prepare them properly.



Munda & Wanna Mar, meaning 'land and sea foods' is one of the urban homelands near Ceduna. Photographer: Luke Smyth.

Barriers and effects

Overfishing and environmental issues

A common complaint during the interviews was that it seemed much harder to get enough wanna ma to feed the family than in the past. This was said to be true of a wide range of species, with people saying they thought the local populations had been steadily declining for a while, and that it had accelerated in the last two years. A number of different explanations were suggested.

The Far West Coast is one of South Australia's top recreational fishing destinations. Some participants suggested that the large numbers of tourists and other visitors to the region were helping to deplete the stocks, especially those close to shore and in well-known and easily accessible spots. It was pointed out that even if all the tourists are staying within the recreational bag limits, the sheer number of people and the amount of time some of them stay could have a significant effect. One participant claimed he knew of caravanners who had stayed around Ceduna for weeks, fishing up to their limit of whiting each day and freezing them, to sell and finance their holiday.

Fears were also raised about razor fish populations. Although there isn't a legal commercial fishery for the species, some people on the Far West Coast do informally collect and sell razor fish, and some people were worried they were 'wiping them out'. Some of those selling razor fish were Aboriginal people coming from other places. Rather than following the cultural fishing rules that most Far West Coast Aboriginal people fish by, they apparently took enormous numbers and 'absolutely stripped' the patches they visited. Similar concerns were mentioned about abalone.

The Far West Coast is also home to a large commercial fishing industry. The Aboriginal commercial fisher we interviewed said that in recent years the fishing had gotten worse. He thought that it could be due partly to some commercial fishers 'hitting it hard'. Another participant suspected that it was harder now to get enough galda maru because the commercial crabbers were catching them before they could make it into Murat Bay.

A number of people suspected environmental changes were also to blame. Some people mentioned the seasons had been 'all out of whack' in the last two years, leading species to come into season at different times than usual. There had also been a number of crab die-offs, which are often due to hot weather. Climate change was seen as a possible cause of these.

Pollution was also suggested as a reason why local wanna ma populations might have declined, particularly from the port at Thevenard. One participant said they didn't eat anything caught near the port anymore, and that oysters from nearby Pinky's Point 'taste like diesel'. Others wondered whether the zircon mineral sands shipped through the port were having an effect on local wanna ma.

Access barriers

Difficulty accessing fishing spots was one of the most mentioned barriers. Many participants noted that they were either partially or fully restricted from using fishing spots that were of general cultural significance, or were important to their families.

One common reason was that while the spots themselves were on public land, they were only accessible through privately-owned land. Some landowners apparently refused to allow people access through their land, or would only allow certain members of a family to do so. Fences and locked gates prevented people from actually getting to spots even if they did have permission. In other places landowners had installed cameras or often came down and questioned people about what they were doing, which dissuaded people from using those spots even if they knew they were allowed to be there.

Some of these spots were particularly important for teaching young children about getting wanna ma, making it harder to pass on cultural knowledge. A number of participants said they felt sad and angry that despite having native title rights they were still routinely prevented from getting wanna ma from spots that were important to them and their families.

Other issues included spots being within or adjacent to national parks, and many people not owning 4WDs or boats, which are needed to access some spots now because of these kinds of barriers.

Fisheries management and enforcement

Many participants expressed frustrations with the current bag and possession limits and the way they were enforced. Although most people said they were aware of the bag and size limits and tried to stay within them, some felt there was ‘a conflict between the laws’; between cultural laws and Primary Industries and Regions SA (PIRSA) regulations.

A common complaint was that the importance of sharing to Far West Coast Aboriginal people’s fishing practices wasn’t recognised. A few people can’t legally collect enough of many kinds of wanna ma to feed everyone they are supposed to. To sidestep this, the whole family has to come along in order for the total take to be below their combined bag limits. This restricts how often people can actually go.

Despite the great effort that most people put in to stay within the bag limits, a number of participants felt they were unfairly targeted by some PIRSA officers, who were described as ‘bullies’. This included feeling like PIRSA officers were constantly keeping an eye on them and asking what they were doing, and regularly pulling them up and checking their catch. One said he felt this had gotten worse in the last couple of years. While people understood the need for fisheries enforcement, these things made them feel like criminals when they hadn’t done anything wrong. They also felt that their status as traditional owners and native title holders was being ignored and disrespected.

A number of participants said they were dissuaded from going fishing for long periods after these kinds of encounters with PIRSA officers. This affected people’s ability to provide for their family and practice and pass on culture.

Barriers to entering commercial fishing and aquaculture

Many participants wanted to see more commercial fishing and aquaculture opportunities for young Far West Coast Aboriginal people, even if they weren’t interested in them for themselves.

Entry into the commercial fishing and aquaculture sectors is, however, out of most people’s reach. Leaving aside costs around gear and boats, licences in most commercial fisheries by themselves are prohibitively expensive. Low incomes also mean starting their own businesses in other on-water industries is difficult for many people on the Far West Coast to imagine without assistance.

Another issue is that the pool of licences is limited; bringing more Far West Coast Aboriginal people into the industry usually requires an existing fisher who is willing to sell. One participant told us about when he tried to start out as a commercial abalone diver: he planned the business and arranged financing to pay the \$90,000 for a licence, but in the end no one would sell one to him, so he had to give up.

Just finding work within these sectors, rather than starting a business, is difficult for local Aboriginal people. Some participants identified the lack of training or apprenticeship opportunities as a major reason for this. The local Aboriginal community development organisation Tjutjunaku Worka Tjuta once part-owned an oyster farm which took on young Aboriginal people and offered on-the-job training, but since it sold its share in the farm nothing has replaced this program. The commercial

fisher we talked to said he would be interested in taking a young Aboriginal person on as a trainee if there was a program he could do it through.

Aspirations

In the interviews participants identified a number of fishing-related aspirations. Often these were meant to directly address the barriers that were talked about in the interviews. They fell into two broad categories: looking after sea country, and livelihoods and incomes.

Looking after sea country

An Aboriginal sea ranger program with fisheries enforcement powers, answerable to traditional owners: The Yalata Indigenous Protected Area Rangers in the west were seen as a success that should be replicated in the east. Participants wanted greater traditional owner involvement in looking after sea country as well as more culturally appropriate fisheries enforcement. This was also meant to help address any issues of Aboriginal people from the Far West Coast or other areas not fishing sustainably, and would provide a small number of culturally appropriate livelihood opportunities.

Greater traditional owner input into fisheries management regulations and policies: Participants wanted the ‘conflict between the laws’ fixed by ensuring that fishing regulations took local practices and culture, and the value of wanna ma to Aboriginal communities, into account. This included traditional owners having a larger say in major decisions that would affect them and greater recognition of them as the native title holders and original owners and managers of the region’s marine resources.

More Aboriginal fisheries officers: Some participants wanted to see more Aboriginal people becoming fisheries officers. It was hoped this would help make fisheries enforcement more culturally appropriate. Another idea was for the potential sea rangers and fisheries officers to consider ways to make sure wanna ma that was confiscated did not go to waste, such as by giving it to Elders or other vulnerable community members.

Livelihoods and incomes

Aboriginal-owned commercial fishing, aquaculture and cultural tourism enterprises: Commercial aquaculture was of particular interest because it was thought this would put less pressure on wild wanna ma stocks. On-water or combined land and sea cultural and eco-tourism enterprises would allow people to earn a living while using cultural knowledge and remaining on country. Participants saw a need for financial and administrative support to help set up these kinds of businesses, including some way to transfer fishing and aquaculture licences to local Aboriginal people.

More pathways for young Aboriginal people to enter these industries: Training and apprenticeship options for young Far West Coast Aboriginal people, and support to access and stay in them, were identified as a priority by many participants. Local training was preferred so that young people could stay on country. The lack of these currently prevents many people from taking advantage of any opportunities that do arise in on-water industries.

An Aboriginal fishing co-operative: Some participants suggested establishing an Aboriginal fishing co-operative which would allow fishers to sell small quantities of wanna ma, for instance if there was some left over after sharing. It was hoped this would provide a little extra income for local families, and could be self-regulated by members according to local cultural laws.

Crocodile Islands

Background

The Crocodile Islands are an archipelago in Castlereagh Bay in Northeast Arnhem Land. The largest community, Milingimbi, is home to around 1,000 people and is found on the island of Yurruwi, approximately half a kilometre off the coast of the mainland. Outstations in the region include Bodiya, also on Yurruwi, and those located on the islands of Murrunga and Lajarra (Howard Island).

The Yolŋu peoples of the modern Crocodile Islands have had marine-focused economies for millennia.⁶¹ While their deep connection to the sea and its bounty has remained strong through the passage of time, how this has been expressed in their economy and culture has evolved in response to environmental and social changes. The Yan-nhangu people, part of the wider group of Yolŋu peoples, are the traditional owners of much of the Crocodile Islands. Yan-nhangu live by a complex system of tenure which considers the seas integral components of the estates of coastal kin-groups.⁶²

‘Macassan’ trepangers began their seasonal visits to northern Australia sometime in the 17th or 18th century.⁶³ Macassans came to Arnhem Land seeking to collect trepang (sea cucumber, family *Holothuriidae*) and pearls, and paid the sea country owners each season for the right to do so.⁶⁴ This payment via exchange extended beyond access rights; for the duration of the season the trepangers would pay for food and fresh water, and permission to build temporary shelters.⁶⁵

Yurruwi became one of three important hubs for the Macassans in Arnhem Land.⁶⁶ There was also economic exchange unrelated to the annual access fees and the trepangers’ immediate needs, with Yolŋu people trading marine resources like turtle shell and mother-of-pearl for Macassan goods such as alcohol, iron tools, rice and money. Yolŋu men were also employed to help collect and process trepang, and were paid in Macassan goods or money for their work.⁶⁷ Milingimbi the modern community arose from the establishment of a Methodist mission on the island in the 1920s.

In the 1960s some of the senior men and women in Milingimbi worked with the then principal of the school, Alan Fidock, to set up commercial fishing and crabbing in the community. These were Yolŋu-run industries initially financed by the fishers themselves through the sale of their art. The first portion of the catch was shared among families according to Yolŋu custom, and the remainder sold to a local fishing co-operative, where the fish and crabs were processed and exported to markets in southern cities. The fishers used both Yolŋu and European tools and knowledge, eventually saving enough to buy a new fishing boat in 1965. This vessel, the *River Song*, was wrecked by Cyclone

⁶¹ L Baymarrwaŋa & B James, *Yan-nhangu Atlas and Illustrated Dictionary of the Crocodile Islands*, Tien Wah Press, Singapore, 2014.

⁶² G Bagshaw, ‘Gapu Dhulway, Gapu Maramba: conceptualisation and ownership of saltwater among the Burarra and Yan-nhangu peoples of northeast Arnhem Land’, in N Peterson & B Rigsby (eds), *Customary marine tenure in Australia*, Sydney University Press, Sydney, 2014.

⁶³ D Wesley, S O’Connor & JN Fenner, ‘Re-evaluating the timing of the Indonesian trepang industry in north-west Arnhem Land: Chronological investigations at Malara (Anuru Bay A)’, *Archaeology in Oceania*, vol. 51, no. 3, 2016, pp. 169–195.

⁶⁴ D Russell, ‘Aboriginal-Makassan interactions in the eighteenth and nineteenth centuries in northern Australia and contemporary sea rights claims’, *Australian Aboriginal Studies*, vol. 2004, no. 1, 2004, pp. 3–17.

⁶⁵ WL Warner, ‘Malay influence on the Aboriginal Cultures of north-eastern Arnhem Land’, *Oceania*, vol. 2, no. 4, 1932, pp. 476–495.

⁶⁶ Ibid.

⁶⁷ Russell, above n 58.

Amelia in 1975, and in the absence of local funds or government support to repair it, this marked the beginning of the end of commercial fishing and crabbing in the Crocodile Islands.^{68, 69}

In 1983, seas in the Castlereagh Bay were closed via sections of the *Aboriginal Land Act 1978* (NT) that allowed entry to waters within two kilometres of land handed back under the NT land rights regime to be restricted without permission from traditional owners. This was motivated by the operations of non-Indigenous commercial fishers in these waters, who were accused by residents of Milingimbi and the mainland communities of Ramingining and Nangalala of taking too many fish, invading ceremonial sites and killing totemic fish.⁷⁰ This closure is still in effect but does not apply to holders of commercial licences which predate the closure.⁷¹

The Crocodile Islands Rangers program began in 2010, with an initial donation from senior Yan-nhaju traditional owner Laurie Baymarrwaia. The program is based in Milingimbi and hosted by the Milingimbi & Outstations Progress Resource Association (MOPRA), managing approximately 400km² of land and 6,000km² of sea country. The Rangers provide a wide array of land and sea management and community support services, and are currently working towards independently declaring their own Indigenous Protected Area.

The Rangers are currently lending their support to the efforts of some traditional owners to re-establish a commercial fishing industry in Milingimbi. The Northern Territory's Aboriginal Coastal Licence (ACL) permits Aboriginal residents of communities on recognised Aboriginal land to run small-scale fishing businesses.⁷² In 2015 the conditions of the licence were amended to allow the use of some traditional fishing gear, and allow ACL holders to sell their catch outside of their own communities.⁷³ At the time of writing ACL holders in Milingimbi were only selling their catch locally, but fishers at the nearby mainland community of Maningrida had just begun exporting bluetail mullet to Darwin.⁷⁴

⁶⁸ B James, 'The Milingimbi fishing industry: The story of the River Song 1960–1975', *Dr Bentley James: The value of cultural difference*, 15 June 2017, viewed 30 June 2017, <https://drbentleyjames.wordpress.com/2017/06/15/the-milingimbi-fishing-industry-the-story-of-the-river-song-1960-1975/>

⁶⁹ B James, 'Crabbing industry at Milingimbi and the Crocodile Islands 1960–1975', *Dr Bentley James: The value of cultural difference*, 8 June 2017, viewed 30 June 2017, <https://drbentleyjames.wordpress.com/2017/06/08/crabbing-industry-at-milingimbi-and-the-crocodile-islands-1960-1975/>

⁷⁰ M Dreyfus & M Dhulumburk, *Submission to Aboriginal Land Commissioner regarding control of entry onto seas adjoining Aboriginal land in the Milingimbi, Crocodile Islands and Glyde River area*, Northern Land Council, 1980.

⁷¹ Northern Territory Government Gazette no. G 30, 1983.

⁷² *Fisheries Regulations 2018* (NT) regs 183–191A.

⁷³ *Fisheries Amendment Regulations (No. 2) 2015* (NT)

⁷⁴ L Marks, 'Maningrida Bluetail Mullet for sale at Darwin Fish Market for the first time in new enterprise', *ABC News*, 10 June 2017, viewed 6 July 2017, <http://www.abc.net.au/news/2017-06-10/maningrida-aboriginal-fishing-enterprises-comes-to-darwin/8607392>

Values

Cultural values

Participants emphasised that their fishing is governed by its own set of laws, independent of laws and regulations set by governments. These come from Rom, the comprehensive prescriptions for the Yolŋu way of being, often translated as ‘Yolŋu law’.

A number of general precepts were nearly universally nominated as governing Yolŋu fishing. These included:

- Not taking more than you need
- Sharing your catch if you do get more than you need
- Not overfishing the same spots
- Not taking individuals that are too small
- Not taking a species outside of its season; this gives it a chance to breed and grow, and many species have more meat and taste better in their season
- Environmental cues indicate when a species will come into season; these include the colour and smell of the sea, the flowering of certain plants, presence of certain animals, and changes to the winds

There are also a number of fishing proscriptions arising from connection to country. These outline the conduct required to ensure due respect is shown to both the country you are fishing on and its owners:

- Permission from traditional owners is required before fishing on country that is not your own; a few participants mentioned that this wasn’t necessary for the area around Milngimbi township
- Traditional owners are responsible for your conduct and safety when you are on their country, so they need to know that you are aware of which sites to avoid and how to behave respectfully
- Respectful fishing behaviour includes not leaving rubbish behind and not wasting catch
- You should share some of your catch with the traditional owner(s) if it is not your country
- Many sites are off limits, either because they are considered sacred or dangerous to visit without the right knowledge; some places may be closed temporarily due to deaths and other events
- There are species, like larratjatja (barracuda, *Sphyraena barracuda*), that are wajarr (totems) for some clans; some people won’t eat these and any fishing of these species should be done respectfully

These rules apply equally to Balanda (non-Indigenous people), Yolŋu and other Aboriginal people. Fishing also provides a cultural benefit in terms of its importance to passing on knowledge. Cultural practices and traditional ecological knowledge are best taught through observation and direct experience, and actually going fishing is the primary medium for

instruction in these. This does not only apply to practices and knowledge directly related to fishing; going fishing is an opportunity to get children out on country, and so learn other practices, traditional ecological knowledge and site-specific cultural content. In these ways, taking children fishing is a key component of the intergenerational transfer of culture and knowledge.

The above values also apply to Yolŋu commercial fishing. While following the requirements of their Aboriginal Coastal Licence, the commercial fishers still see themselves as Yolŋu fishers, fishing the Yolŋu way, and utilising traditional ecological knowledge.

A younger man identified the opportunity to learn traditional ecological knowledge from an older licence holder as something he values about being involved in Yolŋu commercial fishing.



Fabian Gaykamangu poised to spear a ratjuk (barramundi), between Rapuma and Mardanaingura islands, NT, February 2013.
Photographer: John Skuja.

Social values

The interviews revealed that fishing is an essentially social activity. For most people, fishing is an activity done with others, whether they are family or friends. The short questionnaires revealed, however, that a significant number of people also value the solitude that comes with fishing alone.

Sharing catch is a fundamental component of fishing, regardless of whether it is done with others or alone. The idea of someone going fishing alone and then not sharing any of their catch was met with disapproval by some participants.

Some older participants mentioned that in the past sharing catch between the camps brought people close together and helped to keep the peace. Although this is rarer now, large scale sharing still happens; some women from Murrunga talked about catching large amounts of fish in traps and sending them to Milingimbi by plane to be shared out.

One of the key social values that emerges from the sharing requirements is that it creates a social safety net for everyone, and especially for vulnerable members of the community. When sharing beyond immediate family, catch goes to Elders first and after that to others, with preference for people who are sick. Old people will ask younger family members to get them specific foods, and people who are able to go on trips to the outer islands (because they own or can borrow a boat) will bring back food for those who can't. This means that those who cannot fish for themselves, for whatever reason, can still get a healthy and free meal.

The value of fishing as a leisure activity was also recognised by most participants. Fishing as a reason to get out of Milingimbi and out on country was seen as important by a number of participants, and especially for children and young people. Having time away from the perceived 'distractions' and negative influences in Milingimbi was seen as positive and necessary. Fishing is an important form of recreation in a community where options are limited for children and young people: Milingimbi does not have a pool, swimming is unsafe in many places due to the threat of crocodiles, and being on an island means it is difficult and expensive to leave.



Jason Mewala and Jarrod Gingiri looking for a spot to set their net between Yurruwi and Nilpaywa, NT, July 2017.
Photographer: John Paul Janke.

Economic values

The primary economic value of fishing for most participants came from being able to substitute shop-bought food with their own seafood, so cutting down on food expenses. The comparatively high cost of fresh foods because of the region's remoteness, and the high unemployment and underemployment rates and low incomes, only increase the value of fishing as a form of subsistence.⁷⁵

Some participants said that they occasionally trade or barter part of their catch. This could be for part of someone else's catch, for other types of food, or other goods like tobacco. A handful of people (aside from the licensed commercial fishers) said they sold part of their catch sometimes. Trade and barter was generally seen positively as it allowed people to have some variety in their diet and get other items that they wanted, even if they had little money.

It is widely hoped that Yolŋu commercial fishing will create new jobs and sources of income, although these benefits are largely hypothetical at this point; fishing trips are irregular and infrequent, the reasons for which will be discussed in the barriers section below. The trips do, however, provide the community with relatively cheap fish that they can buy from the shop. The Yolŋu commercial fishers generally target garkuyi (bluetail mullet, *Moolgarda buehanani*) and malmuŋu (blue threadfin, *Eleutheronema tetradactylum*).

There is a clear economic benefit here which is widely appreciated, as most people do not have a boat with which they can do this sort of fishing. Anecdotally, it is much harder to conduct net fishing from the beach in Milingimbi than in other communities such as Maningrida, and so the fish sold in the shop is an important source of affordable protein for the majority of people who find it difficult to conduct this type of fishing for themselves.

A final point on community attitudes towards Yolŋu commercial fishing is that it appears from statements made in the interviews and at the July 2017 meeting on commercial fishing in Milingimbi that potential cultural tensions around the taking of fish for sale have mostly been assuaged by the Aboriginal Coastal Licence (ACL) application process.

NT Fisheries has recognised the need to involve communities in the decisions to grant ACLs. An applicant needs to secure the approval of their local council or, if there isn't one, people accepted as leaders by the majority of their community. This allows some collective control over how Aboriginal commercial fishing is conducted in a region, and its intensity.

In the Crocodile Islands a handful of senior men hold the licences, as they are the ones who can take on the responsibilities associated with them. Commercial fishing, even at this artisanal intensity, inherently poses a number of cultural, social and environmental risks. These senior men are already responsible for and accountable to their bapurru (clans), lands, and seas, and so are trusted by the community to ensure that commercial fishing is conducted in an appropriate manner. Jason Mewala, for instance, is endorsed by other senior members of the Maringa alliance of saltwater bapurru to hold an ACL on their behalf. From the point of view of the senior traditional owners who spoke about the issue, there was no concern that Yolŋu commercial fishing posed any cultural risks as the licence holders were trusted to ensure everything was conducted in accordance with Yolŋu values, beliefs and Rom.

⁷⁵ At the last census, 35.6% of people over 15 in Milingimbi were classified as unemployed, as opposed to 7.0% for the whole of the Northern Territory. The median weekly family income was \$714, while the Northern Territory median was \$2,105. Australian Bureau of Statistics, *2016 Census QuickStats: Milingimbi*, 2017, viewed 7 December 2017,

http://www.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/SSC70186

Health values

The health benefits of fishing were widely recognised by participants, and were discussed in nearly all interviews. First among these was that fresh seafood was healthy, and a central part of a healthy diet. Participants drew a distinction between traditional foods, including seafood, and ‘shop’ (Western, processed) foods. While local seafood was said to be healthy and give people energy, shop food was held to make people lazy, weak and lethargic. A number of participants expressed a belief that Yolŋu in the Crocodile Islands need to eat local seafood as part of a traditional diet in order to stay healthy; as saltwater people they need saltwater food.

Eating too much shop food, and not enough traditional foods, was said to make Yolŋu sick. When people begin to feel this way, they substitute more traditional foods, adopting what is locally known as the ‘longbum diet’. It is named for one of its key components, longbum (mud creeper, *Telescopium telescopium*), a marine snail found in mangrove forests.

Longbum are also eaten to relieve cold symptoms. Many other species of maypal (shellfish) are thought to be beneficial to people’s health; some provide energy, others help control high blood pressure and diabetes, and others ‘clean your whole body out’ when you are sick. One older lady said when she gets joint pain she eats plenty of guya (bony fish) as a remedy. When children lose weight due to sickness they are fed fish to aid their recovery.

A number of participants also talked about the importance of exercise to health. Fishing, hunting and gathering traditional foods can be physically taxing, and this was seen as an important factor in the overall health benefits of a diet incorporating more traditional foods.

Safety was raised in many interviews as an important aspect of fishing for participants. In the report back meeting for the case study it was also recommended that this had to be specifically acknowledged in the findings. The intergenerational transfer of fishing knowledge, while important for culture, is also about safety. Children need to be made aware of potential dangers, and how to avoid them. One of these is crocodiles; children need to be shown where they shouldn’t go and what to look out for, and when men go fishing they will often bring spears with them just in case.

Another aspect of this is knowledge of local species. Yolŋu eat a wide range of seafood, and comprehensive knowledge is required to do this safely. Children need to be taken fishing so that they can learn which species are edible and which are not, and which are poisonous. They also need to learn the correct way to prepare each edible species; some can be safely eaten raw, while many others cannot.

Barriers and effects

Although many participants initially said there was nothing that could stop them from going fishing other than the weather, after discussion most eventually identified some barriers to their fishing practices.

Some older participants worried the advent of refrigerators and the shop had eroded the intergenerational transfer of knowledge and culture. As there was less of a need to go fishing for subsistence, these participants feared that many people weren't taking their children fishing often enough, and so culture and knowledge wasn't being fully passed on. In their eyes this threatened children's ability to provide for their families, and look after their old people, when they grew up. Some younger people said they sometimes found fishing more difficult than the older people because they didn't have as much knowledge.

Some participants mentioned that most people find it hard to get the right gear for different types of fishing, such as nets and lines. A related barrier was that boats are expensive to buy or maintain, so in many cases people were reliant on either being able to borrow one, or having someone else share their catch. Many species are easier to find on the other islands, and net fishing from the beach is difficult in Milingimbi compared to other communities. Taking children out to other islands is also necessary for them to learn the stories of those places.

Sickness and advanced age can prevent people from fishing, leaving them reliant on others. Work and other obligations, including cultural obligations, often leave people with little time to fish, impacting them and those who rely on them.

Non-Indigenous commercial fishing

Commercial fishing near the Crocodile Islands by Balanda fishers was a source of concern for most participants. While the two sea closures in the region under the *Aboriginal Land Act 1978* (NT) prohibit watercraft coming within 2km of the coast without permission from the traditional owners, a small number of licences to fish in these waters which predate the closures are still in use. These fishers are mostly netting ratjuk (barramundi, *Lates calcarifer*) from boats.

Participants expressed a number of complaints about the behaviour of these Balanda commercial fishers, including that they:

- don't seek permission from the traditional owners,
- don't provide any information on when they are coming or where they will be going,
- take too many fish and leave dead bycatch,
- steal fish which do not belong to them and sell them elsewhere, and
- don't give anything back to the community to compensate for the above.

Failing to seek permission from the traditional owners was upsetting for many participants. While legally they are not required to due to the grandfathered licences, participants interpreted the lack of any communication as disrespectful. It also led people to worry that the fishers would not know to avoid sacred sites.

From the Yolŋu perspective, any resources belong to the owners of the marine estates in which they are found; fishing without their permission is stealing. Regardless of whether Balanda commercial fishers are actually overexploiting fisheries, the perception in Milingimbi is that they do take too many fish from the area. This perception appears to be present in other Arnhem Land communities.

Some, although not all, participants said they have trouble catching ratjuk, for which they blamed the Balandia commercial fishing boats. As Yolŋu fishing is concerned with only taking as much as is required, throwing bycatch away was seen as wasteful and disrespectful, regardless of whether the commercial fishers have a use for it.

Participants suggested a number of changes that would make them feel better about Balandia commercial fishing in the region. These included:

- asking for permission or at least notifying traditional owners of their plans ahead of time
- paying royalties for access to sea country and taking fish
- sharing or selling some of their catch in Milingimbi
- giving bycatch to the community so it doesn't go to waste

One participant said she wouldn't allow Balandia commercial fishing boats in her waters under any circumstances.

Barriers for Yolŋu commercial fishers

Most of the barriers revealed by Yolŋu commercial fishers in their interviews were economic or logistic. Chief among these was the need for funding for gear and boats. The most frequent Yolŋu commercial fisher is the vice president of MOPRA and a senior member of the Crocodile Islands Rangers; he borrows the Rangers' dinghy and receives other support from them. The Rangers will not be able to subsidise all aspiring commercial fishers, though.

Money is also needed for freezers and other equipment associated with storing and processing fish for sale. Ideally, this would include a dedicated space for processing the fish, with amenities for cleaning, filleting and packing them. At the moment, fish are sold as caught from an esky placed in the shop. Any plans to export fish, or use them for school lunches (see aspirations below), will require a proper processing facility.

An additional barrier is the lack of agreed processes for selling fish within the community. Yolŋu commercial fishers said they were sometimes confused as to whether they or ALPA shop employees were supposed to do different tasks. Setting clear processes and responsibilities will improve the efficiency of the supply chain, and will be a necessary step to take before the long-term aspirations of the fishers can be tackled.

Lack of knowledge and access to training was another barrier identified by Yolŋu commercial fishers. In the short term the fishers need assistance with business administration and planning, and any expansion of the industry will require more local people to gain qualifications in these, as well as coxswaining, food handling and preparation. Training is available in Nhulunbuy, but some participants thought that having training available in Milingimbi occasionally would make it much easier for people to finish courses.

These barriers were discussed at the July 2017 meeting in Milingimbi, and the Yolŋu commercial fishers, MOPRA, other local organisations and the attending NT government agencies agreed to work together to find solutions.

An additional concern raised by the Yolŋu commercial fishers and other participants was the requirement that the ACL holders need to be present when fishing activity under their licence takes place. Ceremonial obligations and other work can prevent the licence holders from going, which means what would otherwise be a successful fishing trip will not be able to proceed.

NT Fisheries has recognised the need to involve communities in the decisions to grant ACLs. An applicant needs to secure the approval of their local council or, if there isn't one, people accepted as leaders by the majority of their community. This allows some collective control over how Aboriginal commercial fishing is conducted in a region, and its intensity.

In the Crocodile Islands, a handful of senior men hold the licences, as they are the ones who can take on the cultural responsibilities associated with them.

These senior men obviously have greater ceremonial obligations than most, and two are heavily involved in ranger work; this can limit the time they have to actually go fishing themselves. As they get older, it will also become more difficult for them to physically contribute to the fishing. They wish to take on the responsibility for ensuring the fishing is done appropriately while younger men under their direction do the fishing, but the rules of the licence dictate they must be physically present at all times.



Jarrod Gingiri weighing out and bagging the day's catch for sale, Milngibi, NT, July 2017. Photographer: John Paul Janke.

Aspirations

Participants nominated a number of shared aspirations related to fishing and fisheries management. A common general aspiration was to make sure cultural knowledge, and fishing knowledge as part of this, is passed on to the next generation. The Crocodile Islands Rangers already have a junior ranger program that partially works towards this aspiration.

Another general aspiration with near universal appeal was to continue protecting sea country, and have greater control over its management. Many participants talked of a need and responsibility to continue caring for and managing surrounding waters through the ranger program. Hand in hand with this was a desire for decisions on the management and use of marine resources to be made by local Yolŋu, to ensure that commercial fishing is done in a way that is sustainable, respects Rom and benefits the community. Three prerequisites for this general aspiration discussed in the interviews were:

- growing the Yolŋu commercial fishing industry
- ensuring outsiders who come to the Crocodile Islands to fish learn about and respect Rom
- increasing the fisheries enforcement powers for the rangers, including being able to compel boats to move on if they do not have permission to be in the area, aren't respecting the wishes of the community and traditional owners, and to keep them out of sacred sites

Most participants wanted the Yolŋu commercial fishing industry to grow. It was hoped that more commercial fishing would mean having a regular supply of fresh, affordable fish, and would create jobs and income for the community. Current ACL holders also wanted to see more people get their own licences; they indicated they were not interested in or expecting to make enormous amounts of money themselves, and are instead motivated by these potential benefits to the community as a whole.

The Yolŋu commercial fishers that were interviewed provided some of their own aspirations for the industry. These included:

- Short to medium term: supply fish for use in school lunches, so students can have guaranteed healthy meals.
- Medium term: export fish to other remote Aboriginal communities, if there is demand.
- Longer term: export fish to Darwin, and potentially cities in other states.
- Longer term: start catching and exporting commercially valuable species which the ACL doesn't currently allow, such as barramundi and mud crabs.

Discussion

Shared fishing values

The primary objective for this project was to identify cultural, social and economic values of Indigenous fishing in the selected case study regions. The project also identified a number of physical and mental health values, as well as an array of barriers to Indigenous fishing practices and how they interfere with fishing values.

From the specific values in each case study region a number of core values have emerged which were shared across the case study regions. These are outlined below.

Shared cultural values:

- Fishing is governed by cultural laws and norms which act to ensure take is sustainable.
 - Only taking as much as you need
 - Not overfishing the same spots
 - Taking species in their season
 - Not taking individuals that are too small
- Fishing is one of the primary ways of living and practising culture.
- Fishing is one of the primary ways of maintaining a connection with country.
- Fishing is one of the primary ways of passing on cultural knowledge.

Shared social values

- Sharing catch is a strong norm; fishers provide for many people and Elders are prioritised.
- Sharing catch strengthens and maintains social ties within families and communities.
- Sharing catch creates a social safety net that supports vulnerable members of the community.
- Fishing is an important social and leisure activity.

Shared economic values

- Subsistence fishing and trade and barter increase discretionary incomes.
- Commercial fishing and aquaculture can provide livelihoods that use existing cultural knowledge and skills and allow people to remain on country.

Shared physical health values

- Certain marine and coastal species are used medicinally or preventatively.
- Fishing gives access to healthy foods which are otherwise unavailable or unaffordable.
- Fishing keeps people physically active.

There were a number mental health values which were shared between the Far West Coast and South Coast case studies. These included:

Shared mental health values

- Fishing helps people to relax and deal with stress.
- Practising culture and providing for their families in this way gives people a sense of pride.
- Fishing is part of people's individual and cultural identities, and thus their sense of self-worth.

Before further discussing these shared values, we first stress that while some of these may be shared with many other communities, this list should not be considered exhaustive or comprehensive. For instance, for some groups in the Kimberley access to customary fisheries is essential to sorry business, since the close family of the deceased are restricted from eating red meat and others care for them while they mourn by catching and cooking fish.^{76, 77} The point is that many Aboriginal and Torres Strait Islander communities will have their own specific and significant cultural practices or ceremonies tied to fishing; the broader values may be similar across much of the country, but the practices recorded in this research should not be assumed to be representative or reflective of all Aboriginal and Torres Strait Islander cultures.

The cultural law or norm of fishers needing to seek permission from the traditional owners of an area was mentioned in all case study regions, but how often it was identified varied greatly between them. It was a nearly universal understanding in the Crocodile Islands, mentioned by many but definitely not all on the Far West Coast, and only occasionally mentioned in interviews for the South Coast. In the Crocodile Islands, discrete estates had their own senior traditional owners who could be asked for permission. A number of participants said that Yolŋu residents of Milingimbi weren't expected to get permission from the traditional owners in order to fish in the area immediately around the community. Otherwise, both Balanda and Yolŋu were expected to ask for permission to fish in an estate they didn't have the appropriate rights in, and were expected to share some of their catch with its traditional owners.

On the South Coast many participants considered most of the region to be effectively their country, either by virtue of membership of a traditional Yuin Nation, or simply by the fact that through high intermarriage and mobility along the coast most Aboriginal people in the region could be said to now constitute a single socio-cultural bloc. On the Far West Coast most participants from a number of different cultural groups said they fished anywhere along a large stretch of coastline, but there was recognition that certain spots were associated with certain families. A recurring answer from those who lived in the Ceduna area was that they would ask permission first if they were planning on fishing further west where the Yalata people lived.

The fact that both southern case study regions have majority non-Indigenous populations may have affected participant explanations to outsiders of how rights to fish arose and the need for traditional owner permission. It is possible that at least some people were aware of more granular marine tenure boundaries, but saw little reason to perpetuate or try to enforce them given the majority of the population was non-Indigenous and unlikely to abide by them.

These value categories overlap extensively, and were used mostly to aid the analysis and presentation of the results. Sharing catch with Elders, for instance, creates a social benefit, but is arguably also a

⁷⁶ F Parriman, pers. comm., 4 September 2018.

⁷⁷ S Toussaint, 'Fishing for Fish and for Jaminyjarti in Northern Aboriginal Australia', *Oceania*, vol. 84, no. 1, 2014, pp. 38–51.

cultural and economic value. What was clear in all case studies was that the values associated with their way of fishing are of great importance to most participants. The identified values paint a picture of fishing and related practices providing significant benefits to individuals, families and communities across nearly all aspects of health, wealth, wellbeing and resilience.

These values are extensively interconnected and for the most part a certain value could not be diminished or substituted without affecting other values. Fishing is thoroughly embedded in the cultural, social and economic lives of many Aboriginal people and communities within the case study regions. Different ‘ways of fishing’ themselves are nexuses of beliefs, preferences and practices that have evolved around the utilisation of particular natural resources. The value of fishing to an individual or a group is not an innate property of the natural resource itself, but is in large part determined by how these ‘ways of fishing’ interact with their wider socio-cultural and economic environment.

Access to marine resources in and of itself does not sustain the full suite of fishing values, although it is a prerequisite. Rather, they are sustained by the ability to access and use marine resources in ways congruent with a group or individual’s customary way of fishing; in other words, being able to fish largely on their own terms. Thus, curtailing or restricting customary fishing practices will affect essentially all fishing values. Forcing Aboriginal customary fishers to abide by laws and regulations designed for non-Indigenous recreational fishers and which do not take into account their particular values and circumstances is not appropriate and likely to actively harm them and their communities. This conclusion is immediately clear from the wide range of values and the effects of barriers to fishing reported by participants in all case studies. Further research is needed to quantify the effects, but it already appears that whether the fishing values of Aboriginal and Torres Strait Islander people and communities can be realised or not plays a role in determining socio-economic and health outcomes, both in direct ways and indirectly as conceived in models of the social and cultural determinants of health.

Countering the loss of value to communities, and so the degradation of community health, wealth, wellbeing and resilience, would require an array of simultaneous interventions to provide substitutes for each and every fishing value. For instance, partially substituting the economic value of fishing to communities which have been restricted in their customary way of fishing is conceivable through targeted food subsidies or income supplementation programs. This would not, however, address the loss of cultural, social and related physical and mental health values. Even then, the total value of the products and services provided through such interventions would likely still not equal the combined value to communities of simply being able to continue customary fishing practices.

Additionally, it is to an extent self-evident that wholesale substitution of pre-existing values once they have been eroded is much less efficient than safeguarding and promoting them now. Sustained and sincere consultation with target communities, aimed at identifying ways to protect and promote customary fishing practices and removing barriers to them, holds potential as a cost-effective way of supporting community development and improving socio-economic and health outcomes. This includes contributing to the achievement of a number of ‘Closing the Gap’ targets.

Attitudes towards selling catch

The perceived importance of selling catch was one of the areas in which the values identified by participants appeared to vary the most both within and between regions. This can be immediately seen in the short questionnaire results.

Case study region median and mode responses to selling catch seem to be roughly correlated with the level of past and current Aboriginal engagement with the commercial fishing sector:

- On the South Coast, where Aboriginal cultural-commercial fishing (as well as Aboriginal employment in the wider commercial sector) has a long history and is still an important feature of life in many communities, the mode was 5 and the median 4.
- In the Crocodile Islands, where there was a significant seafood export industry in the past, and there is now a nascent Aboriginal commercial industry which contributes directly to community wellbeing, the mode was 5 and the median 3.
- On the Far West Coast, where there are currently no community-owned Aboriginal commercial fishing or aquaculture enterprises and only a handful of Aboriginal people working in the commercial sector, the mode was 1 and the median 2.

Even if this explanation is the case, causality potentially flows both ways; it could be that on the Far West Coast there are actually stronger cultural proscriptions against selling catch than in the other regions, for whatever reasons.

Certainly it appears that there are actual differences of participant opinion on the topic both within and between case studies, but we do need to carefully consider how much of this ‘divide’ might be an artefact of the research instruments and approaches, given the near unanimity on most other values.

One possibility is that many participants do consider selling catch an important value, but as it is illegal to do so without a commercial licence, some provided a response that they believed was more socially desirable. On the other hand, selling catch had the highest median response in the case study region which appears to have been worst affected by prosecutions on the basis of assumed intent to sell (South Coast NSW).

Having said this, the higher importance assigned to selling catch in the South Coast case study could have been influenced by our case study partner. Members of the AFRG have advocated for lessening or removing regulation of not just Aboriginal cultural fishers, but also of cultural-commercial fishers. As most of the participants for the South Coast case study either self-selected through attending AFRG meetings or were referred through AFRG contacts, this potentially introduced a bias in participant selection.

It appears likely that many participants responded based solely on their own behaviour when answering the short questionnaire, while others considered the question from a wider community standpoint. Most participants in all three case study regions said they did not sell their catch or only did so infrequently. Regardless of how they might feel about commercial fishing or cultural-commercial fishing, selling catch is less likely to be of personal importance to them. In the same vein, some participants may have been considering only customary fishing, while others were taking into account all kinds of Aboriginal fishing. These two explanations fit with the fact that while selling catch was assigned a lower overall importance in the Crocodile Islands and the Far West Coast, there still appeared to be substantial interest and support for greater Aboriginal involvement in commercial fishing and aquaculture.

Cultural-commercial fishing and narratives of cultural legitimacy

There was a trend from the longer interview results of one group of participants within each case study supporting concepts of ‘cultural-commercial’ fishing (whether it was specifically known as this or not), and others denying that selling catch could be part of cultural or customary fishing. This was most obvious on the Far West Coast and South Coast.

A common argument from participants who believed cultural fishing did include selling catch was that the traditional owners of marine resources had a right to manage and use their resources however they saw fit. Others maintained that the distinctions between subsistence fishing, sharing, trading, bartering

and selling catch were to an extent arbitrary, and that while culture had changed over time there was clear continuity from pre-colonisation practices to today. Fishing has always been an economic activity and a livelihood. The history of communal production and the sharing, trading and bartering of catch within and between groups extends into the deep past. The imposition of the capitalist market economy by colonisation has not fundamentally changed this; ‘selling’ is simply trading for the new good of fiat currency, which is now required for nearly all economic exchange.

Conversely, some participants disagreed that cultural fishing could include selling catch specifically because it enmeshed it within the wider economy. This line of reasoning was wary of fishing practices and their attendant traditional ecological knowledge, as things of profound cultural and spiritual significance, being put to the purpose of making money. For these participants, the capitalist market economy encouraged behaviour that was inimical to their understandings of cultural fishing: greed, selfishness and a lack of respect for country.

This was often linked to criticism of the practices of non-Aboriginal fishers (mostly commercial, but sometimes recreational as well), usually because they were held to be environmentally unsustainable and contrary to the laws and norms which govern cultural fishing. It is perhaps not surprising then that on the Far West Coast, where concerns about the health and sustainability of fish stocks were most commonly heard, selling catch appears to have been ascribed the least importance.

Simultaneously, these perceived differences between Aboriginal and non-Aboriginal ways of fishing were deployed by some participants in order to legitimise local Aboriginal commercial fishing. In the Crocodile Islands, for instance, a contrast was drawn between the Balanda commercial fishing boats and the Yolju commercial fishers. Local popular rhetoric held that the former were unaccountable, culturally insensitive, took too many fish and provided no benefit to the community. Participants said that the latter, on the other hand, were trusted to follow Rom, fish responsibly and sustainably, and provided direct benefits. The Yolju commercial fishers themselves stressed that while they sold most of their catch instead of sharing it, they were still ‘Yolju first’ – abiding by cultural proscriptions and using traditional ecological knowledge – and were primarily interested in supporting their community, not making money.

These kinds of competing community discourses, which seek to legitimise or delegitimise cultural-commercial fishing based on how ‘cultural’ or ‘Aboriginal’ it is or isn’t, should be of keen interest to anyone involved in developing or managing Indigenous fisheries. While not all Aboriginal and Torres Strait Islander commercial fishers consider what they do to be cultural-commercial fishing or similar, given the breadth of values identified in this research it is likely that most commercial fishing by Aboriginal and Torres Strait Islander people supports cultural values in some way or uses cultural knowledge or techniques. It is likely that any development of Indigenous fisheries, whether explicitly cultural-commercial or not, will have to seriously engage with these kinds of narratives and concerns if it is to be culturally appropriate, sustainable, provide maximum benefit (especially in terms of non-economic benefits) and maintain broad-based community support.

Barriers to customary fishing

Identified barriers varied more between case study regions than values. Much of this variation appears to stem from differences in the fisheries legislation, regulations and management and enforcement policies in each case study region, as well as the type of Aboriginal land tenure present.

In the Crocodile Islands, for instance, the barriers and effects related to fisheries enforcement and management seen in the other two case study regions were largely absent. This is explained by the exemption of ‘traditional’ Aboriginal fishing from regulation, found in s 53 of the *Fisheries Act 1988* (NT). The combined effects of the *Aboriginal Land Rights Act (Northern Territory) 1976* (Cth), the

‘Blue Mud Bay’⁷⁸ decision and the two sea closures adjacent to the Crocodile Islands under the *Aboriginal Land Act 1978* (NT), as well as the extremely remote location, provided further protections for local Yolŋu fishers. The most cited issue on this topic was actually the perceived *lack* of enforcement against Balanda commercial fishers in the region.

NSW fisheries laws and regulations only recently recognised ‘Aboriginal cultural fishing’ as a separate sector with its own regulations via the *Fisheries Management Amendment Act 2009* (NSW). At the time of writing, however, while the FMAA itself has been enacted, s 21AA of the Act – which allows for Aboriginal cultural fishers to be exempted from many regulations made under the *Fisheries Management Act 1994* (NSW) – is yet to commence. Interim regulations covering Aboriginal cultural fishing are similar to those for recreational fishing, but without the need for a licence and with bag limits doubled for most species. As seen above, research participants from the South Coast case study argued that this was still inadequate, and especially that these bag limits did not take into account the common practice of a small group of regular fishers providing for extended networks of people who for various reasons could not fish themselves.

Aboriginal cultural fishers in NSW can apply for one-time exemptions to bag limits and other regulations in order to prepare for cultural or ceremonial events, but this avenue appears to be rarely used. Reasons might include that asking for applications to be submitted six weeks ahead of time is impractical, that the required information and supporting documents are considered too onerous or invasive by fishers, or that people find it insulting or disrespectful to be asked to apply for a permit simply to practice their culture and exercise their rights as traditional owners. Fishing for everyday subsistence unrelated to a specific ceremonial or cultural event is not covered by these permits.

Through the Batemans and Jervis Bay Marine Parks, large sections of coastline and estuaries have been designated sanctuary zones or habitat protection zones. In sanctuary zones, all fishing activities are effectively prohibited. As already outlined in the results section, this has placed additional restrictions on customary fishing practices and values on the South Coast of NSW.

Testimony from participants in the South Coast case study indicates that beyond the loss of significant fishing values across the board, enforcement of regulations which do not accommodate customary fishing practices has in itself had profound negative effects on individuals, families and communities in the region. While a native title claim over the entire NSW South Coast has been registered with the National Native Title Tribunal, anecdotally these presumed native title rights have not led to an end to attempted prosecutions by DPI.⁷⁹

Compared to NSW, the legal environment in SA is more accommodating of Aboriginal fishing. There are two marine parks on the Far West Coast, but Aboriginal persons acting in accordance with ‘Aboriginal tradition’ or an Indigenous Land Use Agreement are exempt from marine park restrictions. ‘Aboriginal traditional fishing’ is also recognised as a distinct sector. *Karpany v Dietman*⁸⁰ set a precedent that fishing in valid exercise of native title rights and interests was not subject to size limits created by the *Fisheries Management Act 2007* (SA) and its regulations, through the action of s 211 of the *Native Title Act 1993* (Cth). While bag and possession limits are yet to be successfully tested in this way in SA, as they arise from the same instruments that the size limits do it is likely that they too would be overridden by s 211.

Despite the fact that the traditional owners of the Far West Coast had their native title recognised in 2013, and have a current claim over the adjacent seas, many people there still recorded interactions with PIRSA fisheries officers as a barrier to their fishing. This is possibly due to misunderstandings

⁷⁸ *Northern Territory of Australia v Arnhem Land Aboriginal Land Trust* [2008] HCA 29.

⁷⁹ On a number of occasions Aboriginal fishers have been charged with minor infringements, only for the case to be dropped by the prosecution or thrown out by the magistrate once it became clear the defendant would be pursuing a defence based on native title rights. W Stewart, pers. comm, 25 July 2017.

⁸⁰ *Karpany v Dietman* [2013] HCA 47.

by Aboriginal fishers and fisheries officers of the rights afforded by native title. FWCAC has provided identity cards to its members which assert their status as native title holders in order to counter these and similar issues. In conversations with Far West Coast residents after data collection was completed, it was suggested that while the *Karpany* precedent probably would protect a native title holder who exceeded bag limits, nobody wants to be the ‘guinea pig’ for a test case because of the immediate reputational and financial repercussions, not to mention the inherent risk that the Court will not decide in your favour.⁸¹ So long as the matter is considered unsettled and there are PIRSA officers that try to enforce recreational fishing limits on native title holders, there will be native title holders who are effectively constrained in the enjoyment of their native title fishing rights because they fear civil and criminal penalties, or wish to avoid negative interactions with fisheries officers.

This is a key point seen in both the Far West Coast and South Coast case studies which likely applies in many parts of the country: regardless of whether or not they possess a proven or highly probable native title right to fish, the actions of fisheries enforcement authorities can still intimidate or dissuade native title holders from exercising their rights. Recognised native title, while it certainly does not hinder the ability of communities to conduct customary fishing practices, is not a panacea.

That participants also reported numerous barriers to do with access to fishing spots, the negative impact of public and official perceptions of Aboriginal fishing, a lack of agency and input into fisheries management decisions that affect them and concerns about the health of fish stocks and the sustainability of the current take, reinforces this point. Even in the Crocodile Islands, where legal protections for Aboriginal fishing rights were arguably the strongest, participants identified a number of factors which made it harder for them to fish or threatened the values they held in fishing and their sea country.

A legal right to fish, whether it stems from native title, other Indigenous tenure, or state or territory legislation and regulations, does not necessarily translate into a full enjoyment of that right, nor does it provide full protection to Aboriginal and Torres Strait Islander values in fishing and sea country. Ensuring cultures of respect and understanding for the rights and interests of native title holders are fostered within fisheries enforcement and management agencies, and maintaining positive working relationships between these agencies and native title holders, is also necessary. Aboriginal and Torres Strait Islander peoples and communities are the least powerful stakeholders in most fisheries due to their comparatively limited political and economic influence. Yet, they perhaps have more to lose than any others from management changes that, while they may suit other fishing sectors or stakeholders, can devastatingly restrict customary fishing or threaten sea country values.

Aquatic resource aspirations

Support for increased Aboriginal engagement with commercial fishing, aquaculture and water-related tourism opportunities appeared to be high in all three case studies. This included individual opportunities, such as jobs or private businesses, but also collective opportunities, like community-owned aquaculture enterprises and fishing co-operatives. There was also interest in greater involvement with the management of their fisheries, and specifically in Indigenous sea management programs, such as ranger programs.

Common justifications voiced by participants on the desirability of industries related to marine resources over others included that they provided livelihoods which allowed people to work and stay on country, could utilise cultural knowledge and skills, and involved the management and use of their traditional resources. This was true whether they were considering individual or collective opportunities.

⁸¹ K Harrison, pers. comm, 3 November 2017.

A recurring (although not universal) theme was that opportunities for local Aboriginal people in these industries should be managed according to local ways of fishing. In the Crocodile Islands, for instance, ACLs have been allocated by traditional owners based on local cultural governance principles. On the Far West Coast, participants who were interested in the idea of a local Aboriginal fishing co-operative wanted it to be managed according to local cultural laws around fishing, as a kind of adjunct to customary fishing practices. On the South Coast the cultural-commercial fishers incorporate customary sharing practices and seasonal targeting of species into their work, practising a form of artisanal fishing quite different to other commercial operators. It is likely that ensuring opportunities for greater Aboriginal and Torres Strait Islander involvement in commercial fisheries are given the flexibility to at least partially conform to local ways of fishing would increase not only their community support and perceived cultural legitimacy, but also the provision of non-economic values.

Barriers to fishing aspirations

In all three case studies participants identified a need for external support to increase local Aboriginal engagement with the commercial fishing and aquaculture industries, and other water-related industries. Access to significant financial capital, in the form of grants or loans, is needed to set up businesses and pay for licences, boats, gear and other assets and operational costs. In all case studies a desire for local vocational training opportunities, apprenticeships or similar that were geared towards Aboriginal people was also expressed. This included not just directly relevant regulatory requirements like coxswains' certifications, but also training in subjects like bookkeeping, business administration and food handling and preparation. In the Crocodile Islands in particular it was clear that limited resources and the relative difficulty of getting training in such a remote location were two of the main hurdles to the expansion of Yolŋu commercial fishing.

Training in these additional skills could support the more effective and sustainable management of new businesses, in addition to putting the community as a whole in a better position to be able to take advantage of value-adding opportunities in the supply chain. If even a small portion of the value chain for a product can be captured within the community, while still being economically viable, this increases not just the price that can be asked for the final product but also creates additional livelihoods and incomes.

Governments have already taken some steps to support these aspirations. The NT Department of Primary Industry and Resources has actively pursued a policy of supporting aspiring Aboriginal commercial fishers in remote communities to encourage economic development. This has included creating an inexpensive, special purpose licence (the ACL) and providing training and mentorship programs in targeted communities. In NSW funding from the Commonwealth and state governments has created two financial trusts to assist Aboriginal fishing aspirations. One trust, administered by NSW Aboriginal Land Council, will be used to purchase commercial licences, held in trust, for use by Aboriginal fishers. The other, administered by the Aboriginal Fishing Advisory Council of DPI, will be open to applications from Aboriginal people and organisations for grants and loans to assist new and existing businesses associated with fisheries resources. There is, however, more that can be done.

The difficulties that many current and aspiring Aboriginal fishers have remaining in or entering commercial fisheries are not surprising. Significant amounts of financial and human capital are required, and the returns not always regular or guaranteed. In addition, the change to catch share management regimes in many Australian fisheries has increased entry and operation costs further by requiring fishers to buy shares or quotas.

Individual fishing quotas, individual transferrable quotas and similar instruments privatise access to commercial fisheries. If implemented well, they can help counter some of the worse environmental outcomes resulting from the 'tragedy of the commons', and improve the economic efficiency of

fisheries by reducing overcapitalisation.^{82,83} What is economically efficient, however, is not necessarily in the best interests of fishers and fishing communities. Many observers have noted that the introduction of individual catch share instruments has led to share concentration in fewer and fewer hands, leading to rent-seeking behaviour, absentee owners and decreased overall employment.^{84,85,86} The economic and social consequences of these changes disproportionately affect poorer fishers and communities, who do not have the financial capital to compete with large shareholders for the limited number of shares, with predictable consequences on economic inequality and issues of social justice.^{87,88,89} New fishers are locked out, and existing small-scale fishers often forced out, by the logic of the market.

The persistent socio-economic marginalisation of Aboriginal peoples and the economically suboptimal (but non-economic value producing) practices of some Aboriginal commercial and cultural-commercial fishers potentially leave them particularly vulnerable to these processes. Schnierer and Egan have previously identified these and other issues Aboriginal commercial fishers have faced following the introduction of catch share management in many NSW fisheries.⁹⁰ It is likely that Aboriginal commercial fishers and their communities nationwide have shouldered, and will continue to shoulder, a disproportionate share of the negative impacts of the introduction of catch share management regimes unless steps are taken to counteract this. This is an area where further research is required.

There are certainly valid fisheries management reasons for moving towards share-based regimes. Policy objectives of supporting Aboriginal fishing values through continued and increased Aboriginal and Torres Strait Islander engagement with commercial fisheries will probably not, however, be best served by forcing strict conformance to established commercial fishery management requirements, including catch shares. Extensive free, prior and informed consultation and negotiation between fisheries managers, fishers and communities on how to best pursue this will be required. Possible solutions suggested by participants in this research included governments providing quotas/shares to families or communities for collective use, or waiving the requirement to hold shares for Aboriginal commercial fishers.

Public and official perceptions of Aboriginal peoples' harvest of aquatic resources has often, although not always, been negative. This represents not just a barrier to customary fishing, but also continued and increased Aboriginal involvement in the commercial sector. In the Far West Coast and South Coast case studies a number of participants believed they were unfairly and disproportionately targeted by fisheries enforcement officers; on the South Coast there was also reportedly harassment of fishers by elements of the general public, who tipped off authorities when they saw Aboriginal people diving. This is partially driven by a lack of understanding and a long history in both southern case studies of high numbers of Aboriginal prosecutions in high value fisheries; particularly abalone and crayfish. It should be noted that there are no longer believed to be any Aboriginal commercial fishers

⁸² UR Sumaila, 'A cautionary note on Individual Transferable Quotas', *Ecology and Society*, vol. 15, no. 3, 2010, p. 36.

⁸³ JN Sanchirico & RG Newell, 'Catching market efficiencies: Quota-based fisheries management', *Resources*, vol. 150, no. Spring 2003, 2003, pp. 8–11.

⁸⁴ KR Criddle & S Macinko, 'A requiem for the IFQ in US fisheries?', *Marine Policy*, vol. 24, no. 6, 2000, pp. 461–469.

⁸⁵ E Eyþórsson, 'A decade of ITQ-management in Icelandic fisheries: consolidation without consensus', *Marine Policy*, vol. 24, no. 6, 2000, pp. 483–492.

⁸⁶ T Yandle & CM Dewees, 'Consolidation in an Individual Transferable Quota Regime: Lessons from New Zealand, 1986-1999', *Environmental Management; New York*, vol. 41, no. 6, 2008, pp. 915–928.

⁸⁷ J Olson, 'Understanding and contextualizing social impacts from the privatization of fisheries: An overview', *Ocean & Coastal Management*, vol. 54, no. 5, 2011, pp. 353–363.

⁸⁸ Sumaila, above n 80.

⁸⁹ G Pálsson & G Pétursdóttir (eds), *Social Implications of Quota Systems in Fisheries: Proceedings of a Seminar Held in the Vestman Islands in May 1996*, Nordic Council of Ministers, 1997.

⁹⁰ Schnierer & Egan, above n 25.

in these fisheries in either case study region, and there continue to be very few avenues for them to enter the industry.

The high numbers of prosecutions partially stem from the fact that these species are culturally significant, and current access arrangements are seen as severely restricting sustained cultural practice. While some of those prosecuted certainly did have intentions to make tens or hundreds or thousands of dollars illegally selling large numbers of abalone, many were diving purely in order to feed their families. Participant testimony indicated that in some cases people resorted to selling abalone or crayfish because they had no other source of income. This was often part of a cycle of criminalisation, where even if they had been originally prosecuted for purely communal harvest in excess of bag limits, criminal convictions removed any access to stable employment, and so they resorted to diving. Some participants further noted that for the principal divers in a community, selling abalone was a rational response to the management and enforcement environment. Cultural values and obligations meant they felt they couldn't stop diving, and the fact that the bag limits were inadequate for communal needs meant that by doing so they would inevitably face prosecution regardless of whether they planned to sell any of their catch. As it was explained, if you know you will receive the punishment for 'poaching', the most rational choice is to actually do so and receive the monetary benefits as well.

As a result many of the people with both the most cultural knowledge and practical experience with diving are also barred from getting commercial fishing or aquaculture licences, or holding shares in fisheries of interest, because of their prior prosecutions. As noted in the results, many younger people have had their access to this relevant knowledge and experience restricted as a result of public disapproval and the fear of prosecution. This has created a situation where the relevant human capital in Aboriginal communities that could contribute to the success and benefits of further Aboriginal engagement in these industries is simultaneously being eroded and much of it rendered unusable.

Connection between aspirations and Indigenous land and sea management

Sustainably managing sea country and its resources was at the heart of a number of the values, cultural laws and fishing practices identified in this research. Taken together these represent regional Indigenous fisheries management regimes which continue to exist in parallel to, and occasionally in conflict with, those of the state. Broad areas where conflict between the two occurs can be seen in the concerns of participants about the supposedly unsustainable practices and total catch volume of the recreational and commercial sectors, and the barriers to customary practices and access to fisheries created by some current fisheries management approaches.

Lacking control or an adequate say in fisheries management policies and regulations that affected them was nominated as a barrier for many participants across all three case studies. Many participants voiced a desire for increased input into and control over the official management of their traditional fisheries. Beyond the practical desire to shape fisheries management policies and regulations to be more accommodating of their customary fishing practices and prevent further erosion of their values, many participants also argued for this on the basis that they have a right to significant input by virtue of being the traditional owners of their fisheries. Related to this was the cultural obligation many felt to protect their sea country and its resources, which they could not do effectively if they had limited influence over fisheries management decisions.

As such, it is unsurprising that many participants' aspirations related to fishing were conceptually linked with land and sea management responsibilities. That having rights to a resource and making a living from it confers a responsibility to protect and conserve it was by no means an alien idea. On the contrary, this responsibility appeared to be a common thread in many of the cultural laws to do with fishing, across all the case study regions. This desire for greater involvement in and control over fisheries management extended beyond decision-making, and included increased responsibility in enforcement and environmental monitoring and management.

In the Far West Coast and South Coast case studies, some participants identified a need for culturally appropriate fisheries enforcement which is answerable to traditional owners, in the form of Aboriginal sea rangers. While this was a general aspiration, with the rangers envisaged as having land and sea management activities as their primary business, it was also a response to the practical questions of how to ensure fishing rights derived from native title would not be abused, and how to enforce local cultural laws.

It is worth noting that creating sea ranger programs in these regions would not require starting from scratch. In NSW a number of the South Coast LALCs already have enthusiastic, though often poorly resourced, Indigenous ranger programs which conduct fee-for-service work. On the Far West Coast there is already an Indigenous ranger program for the Yalata IPA, and in the eastern part of the region the interviews revealed that at least one group of traditional owners has been contracted by local NRM bodies to perform land management activities (such as cleaning rock holes). In both regions there are already bases to build from, and existing programs

In the Crocodile Islands, where there is already a well-established Indigenous ranger program, there was a desire for the Rangers to be given greater capacity to police the behaviour of fishers, and compel non-local fishers to leave if they are conducting themselves poorly or operating without permission from traditional owners. The Crocodile Islands Rangers have also been directly subsidising and supporting some of the ACL holders in Milingimbi. Partially this is because the Rangers are the only organisation in the region with the capacity to effectively do so. As outlined in the results, however, Yolŋu commercial fishing was thought to have the potential to improve a number of health outcomes for the community, as well as creating culturally appropriate livelihoods, hence the Rangers' interest in pursuing the idea. The founder and seed donor of the ranger program, L Baymarrwaŋa, also had early on conceived of the program as both managing sea country and providing fresh seafood for local children.⁹¹ The Crocodile Islands Rangers are working to declare their own Indigenous Protected Area, and Yolŋu commercial fishing will be included in the management plan for the IPA. The Rangers' parent organisation, MOPRA, has also integrated Yolŋu commercial fishing into its business plan. MOPRA and the Rangers will require additional funding and support, however, in order to continue to foster the growth of the commercial fishery.

In short, Indigenous land and sea management programs were closely linked to participant aspirations to increase their role in the management of their traditional fisheries, and also aspirations for increased involvement in commercial fishing and aquaculture. Both commercial use of marine resources and Indigenous land and sea management programs are ways of creating livelihoods through working on sea country, and were seen as complementary; the right to live off of sea country coming with a responsibility to protect and properly manage it. In this way these two sets of aspirations can support each other; established Indigenous ranger programs can act as legitimisers and sponsors for nascent fishing enterprises, whilst commercial fishing aspirations and increased recognition of customary fishing rights create a desire and need for Indigenous ranger programs to monitor and care for sea country, and provide culturally appropriate fisheries enforcement.

Together, both sets of aspirations represent the fact that Aboriginal and Torres Strait Islander peoples around the country are seeking a greater role in all aspects of the management of fisheries; to ensure the health and wellbeing of both their communities and their waters.

⁹¹ B James, 'Crocodile Islands Draft IPA 2017. No Small Beer.', *Dr Bentley James: The value of cultural difference*, 31 December 2017, viewed 15 January 2018, <https://drbentleyjames.wordpress.com/2017/12/31/crocodile-islands-draft-ipa-2017-no-small-beer/>

Conclusion

Objective 1: Identify cultural, social and economic values of Indigenous fishing at selected case study communities

Participatory mixed methods research in three different case study regions identified a swathe of baseline Aboriginal values in fishing. In addition to the targeted cultural, social and economic values, a number of physical and mental health values were also identified. The extent of these values paints a clear picture of the profound importance of fishing in all aspects of the lives of Aboriginal individuals, families and communities in each region. Specific values included the importance of customary fishing to practising and passing on culture, the creation of social safety nets and strengthening of social ties through sharing catch, the economic value of subsistence fishing, and the health benefits of fishing-related exercise and seafood consumption. The existence of so many values that were shared between the case study regions despite significant demographic, social, economic and cultural differences between them suggests that many of these values are likely to be shared by numerous Aboriginal and Torres Strait Islander peoples across the country.

Beyond values, the research identified a range of existing barriers to customary fishing and their consequences. Such barriers were reported in all case study regions, although the nature of the principal barriers varied; mostly depending on the political and legal context of each case study region. All barriers to customary fishing were perceived by participants as having negative consequences for the health, wealth and wellbeing of their communities, through their impact on fishing values. Some barriers, such as the criminalisation of customary practices, had direct negative consequences of their own on top of value loss.

Current or hoped-for Aboriginal engagement in on-water industries like commercial fishing and aquaculture was consistently identified by participants as also producing significant non-economic values. A recurring theme was a desire for the flexibility to conduct commercial harvest in ways that explicitly incorporated non-economic values; for instance, fishing in accordance with local cultural law, or sharing some catch within communities rather than selling all of it.

Identified aspirations often sought to either reduce the erosion of values by existing barriers, or expand values to the benefit of the community. Aspirations were largely tied to having greater input into and control over fisheries management decisions, or creating more opportunities for local Aboriginal people to make a living off of sea country.

Objective 2: Articulate connections between established Indigenous land and sea management regimes and Indigenous aspirations in fisheries

In all case study regions, a range of participant aspirations around sea country and fisheries were identified. Broadly, these included having more control over the management of their fisheries and sea country, as well as more opportunities to make a living from their sea country. The latter included opportunities in commercial fishing and aquaculture, and livelihoods derived from land and sea management activities.

In each case study region there were shared sets of beliefs and practices, often in conflict with the fisheries regulations of the state, which together constituted local Indigenous fisheries management systems. Aspirations for greater input into and control over fisheries management were partially about having more power to influence management policies to be more accommodating of customary fishing practices. Another motivation identified by participants was increasing their capacity to fulfil their

obligations to country, to care for it and manage its resources. The desire for more involvement was not limited to influence in decision-making; in two case study regions participants talked about creating new Indigenous land and sea ranger programs with fisheries enforcement powers, and in the Crocodile Islands there was strong support for the existing ranger program and a desire for them to be given increased powers to police the behaviour of fishers. Indigenous land and sea management regimes were thus fisheries management aspirations in themselves, and existing programs were also seen as vehicles for realising further fisheries management aspirations.

The example of the Crocodile Islands Rangers showed how existing land and sea management regimes can also be vehicles for realising commercial fisheries aspirations. The ranger program and its host organisation, MOPRA, have provided financial and logistical support to the Yolŋu commercial fishers, as well as incorporating the continued development of the industry into their planning. In many remote communities Indigenous land and sea management programs are likely to be among the local organisations with the greatest capacity for these types of support, and the explicit incorporation of commercial fishing into country management plans may help to ensure commercial fishing is, and legitimise it with the community as, a sustainable venture.

For many, the right to making a living from country and its resources was closely linked to the obligation to protect and manage them. In this way, Indigenous land and sea management regimes, such as Indigenous ranger programs, were conceptually connected in all three case study regions with aspirations for greater recognition of customary fishing rights (such as through native title or changes to Aboriginal fishing regulations) and increased Indigenous commercial harvest. Indigenous sea rangers, potentially with fisheries enforcement powers, represented an attempt at a practical solution to issues posed by these aspirations, such as the need for more culturally appropriate fisheries enforcement and the dearth of instruments for enforcing local cultural fishing laws.

In short, Indigenous land and sea management regimes were connected to fisheries aspirations in a number of ways:

- The creation of new Indigenous land and sea management regimes is a fisheries management aspiration in itself, simultaneously increasing the influence Aboriginal and Torres Strait Islander communities have over fisheries management decisions and their capacity to fulfil obligations to sea country.
- Indigenous land and sea management regimes are a livelihood aspiration; ranger programs and similar create jobs which allow people to work on their sea country and make a living through this.
- Existing Indigenous land and sea management regimes can act as vehicles for fisheries management aspirations; Indigenous ranger programs will often be among the organisations best placed to take on increased fisheries management responsibilities on behalf of their communities.
- New and existing Indigenous land and sea management regimes can facilitate the general management of Indigenous fisheries following the realisation of other fisheries aspirations, and provide solutions to specific issues like culturally appropriate fisheries enforcement and the enforcement of local cultural laws.
- Existing Indigenous land and sea management regimes can foster the development of fledgling commercial enterprises; incorporating these endeavours into management plans can provide them a level of legal and cultural legitimacy, plus financial, logistical and other kinds of practical support from ranger groups.

Objective 3: Support the recognition of Indigenous values and use of aquatic resources in fisheries management

This project has produced a number of outputs which demonstrate the importance and benefits of Aboriginal customary and commercial fishing to communities, and thus our society as a whole. The community reports serve as succinct statements of some of the values, barriers and aspirations of Aboriginal people in regards to fishing in each case study region. The online exhibition is intended as an accessible, general interest document that can support greater appreciation of Indigenous values in fishing among the wider public.

This research and its outputs, particularly this report and the community reports, can also allow Aboriginal and Torres Strait Islander communities and organisations to ‘level the playing field’, so to speak, when it comes to discussions and consultations on fisheries management changes. Fisheries stakeholders such as non-Indigenous commercial and recreational sector representatives regularly deploy evidence of their economic contribution to support their interests; Aboriginal fishers in this project’s case study regions can now provide a summary of their values as clear evidence of not only what is important to their communities, but also the wide-ranging benefits created by their fishing. As discussed, it is likely that Aboriginal and Torres Strait Islander communities in other regions may share many of the values identified here, and if need be could point to the findings here prior to or in lieu of conducting their own research.

The identification of barriers to customary fishing, as well as barriers to Indigenous fisheries aspirations, also directly supports the recognition of Indigenous values and use of aquatic resources in fisheries management. Expounding on barriers and their far reaching consequences demonstrates to governments, fisheries managers and other stakeholders the need for Indigenous values to be taken seriously, in order to stem the erosion of values and the effects on health, wealth and wellbeing. It also demonstrates the need for Aboriginal and Torres Strait Islander peoples to have a much greater role in the management of their fisheries, so as to halt and potentially reverse the damage inflicted to date by the marginalisation of their perspectives. Communities can use the outputs of this project to help explain the problems they face to fisheries managers, and to justify a greater say in fisheries management decisions.

Already the AFRG has used project outputs and findings in their own community outreach work and in negotiations with DPI. Project findings were also presented to a meeting of community and government stakeholders on the development of a local commercial fishing industry at Milngibbi in July 2017. Project findings also contributed to the AIATSIS submission to the Productivity Commission inquiry into marine fisheries and aquaculture, and a submission on the draft NSW Marine Estate Management Plan 2018-2028.

Objective 4: Build Indigenous and non-Indigenous capacity for collaborative fisheries research and management

The instruments created for this project will be of use in further research to establish baseline fishing values in other regions of the country. While they were tailored for each case study region in this project, they can easily serve as templates for the creation of research instruments for other regions, with options available for conducting fishing values research in both predominantly English and non-English speaking communities. The tools used in this project have shown themselves to be comprehensive but not onerous to use. They can also serve as a departure point for developing instruments for more detailed and granular studies of fishing values.

The community research project officers who worked on this project received training and instruction in techniques for conducting research interviews and analysing qualitative data, both during visits to AIATSIS and during fieldwork. These skills are now available in each case study region if project

partner organisations wish to pursue further social science fisheries research, whether independently or collaboratively.

The findings and outputs of this project also help to bridge the gaps in understanding of Aboriginal and Torres Strait Islander values, barriers and aspirations in fishing, supporting collaborative fisheries management. While fisheries managers and decision-makers in related government agencies are often aware of the fact that Indigenous values in fisheries are not identical to those of non-Indigenous recreational and commercial fishers, this doesn't necessarily translate into an understanding of the importance of these differences, nor the mechanisms by which management frameworks and regulations designed for non-Indigenous fishers can severely and disproportionately affect Indigenous communities. Representatives from relevant state and territory fisheries and marine resource management agencies took part in case study report back meetings, where they were able to gain a broad appreciation of Indigenous fishing values, barriers and aspirations, from both the presentation of project findings and discussion with community members.

The collation of fishing values, barriers and aspirations further supports our project case study partners to collaborate with fisheries managers and pursue fisheries-related objectives. The research results can inform strategic planning, by allowing the participating Aboriginal organisations to identify and organise their priorities within the fisheries space, whether in regards to protecting values, working to remove barriers or achieving fishing and sea country aspirations. Having clear priorities and objectives that can be presented to fisheries managers aids the process of collaboration on management issues.

Implications

The full impact of this project will take some time to manifest; uptake of research results, outputs and recommendations will be an ongoing process. Detailed information on the adoption and use of project outputs at the time of writing is presented in the **Extension and Adoption** section.

The findings of this project confirm and extend those of previous research; that fishing is of significant and multifaceted value to many Aboriginal communities, and so is an essential element in safeguarding and improving their health, wealth and wellbeing. At the same time, there are a number of barriers which impede customary fishing activities and the achievement of community fishing aspirations. Although these barriers do differ depending on regional context, there are a number of commonalities. Conflicts between some elements of customary ways of fishing and certain aspects of state and territory fisheries management and environmental protection regulations and legislation is one of these.

The implications of this growing body of evidence for fisheries management are substantial. It demonstrates the need for continuous re-evaluation of how fisheries management systems interact with Indigenous customary and commercial fishing. In some cases radical restructures to management frameworks may be desirable, and in others significant improvements could be achieved via limited targeted initiatives or small changes to existing programs and regulations, whether as one-offs or iteratively.

It may not be possible to design new systems or programs which completely satisfy all parties, but an important conclusion from this research is that any fisheries management programs or frameworks which seek to accommodate or promote Aboriginal and/or Torres Strait Islander fishing values will only be optimally effective if Indigenous ways of fishing can be recognised and incorporated on their own terms. Attempting to manage customary fishing as though it were functionally a subset of the recreational sector, for instance, or creating Indigenous-targeted commercial opportunities which do not take into account nor accommodate customary elements probably won't lead to maximised outcomes for affected communities. Forcing fishers to conform to sector boundaries and conceptual models created for non-Indigenous fishers and imposed from above by managers is unlikely to realise the full potential benefits of Indigenous fishing values.

Recommendations

This project has developed a methodology and tools which could be readily adapted for different regions and communities. These could serve as an important resource for Aboriginal and Torres Strait Islander community organisations, land councils and PBCs which wanting to conduct their own fishing values research, whether on their own or in collaboration with actors in other sectors. Making templates created from the research instruments available online would facilitate the research priorities arising from this project (identified in the next section), and could also create an avenue for collaborative iterative refinement of the instruments and methodology with the community researchers that use them.

CSIRO has expressed interest in working with AIATSIS in the near future on developing methods for research impact evaluation. This project is currently being considered as a possible case study for this, due to the project's direct engagement with communities, the differing contexts and needs of each case study region, and its potential short-term and long-term impacts. This could provide important information on the utility of participatory values research to engaged communities, and how best to design this kind of research to maximise positive impact.

Considerable effort has been invested in communicating the results and implications of this research to an array of different audiences, including with the community reports, the online exhibition and this report (see the **Project materials developed** section for a complete list). There is, however, a clear need for shorter documents which concisely convey the overall project findings, particularly identified values. Technical summaries and policy briefs in particular would be of use to fisheries managers and governments. Non-technical general summaries tailored for Indigenous communities and the general public, focusing on the identified values, barriers and aspirations, could contribute to raising the profile and public understanding of Aboriginal fishing values and the potential uses and importance of fishing values research.

Further development

Customary fishing and related activities can evidently play important roles in cultural expression and transmission, community resilience and social cohesion, economic outcomes and individual identity and self-esteem. The ability (or not) to practise these thus influences the cultural and social, not to mention physical, determinants of health for many Aboriginal and Torres Strait Islander peoples. Barriers to customary fishing not only restrict the enjoyment of such benefits, but can also produce additional negative consequences such as incarceration and other legal penalties. As such, further research on the fishing values, barriers and aspirations of Aboriginal and Torres Strait Islander individuals, peoples and communities will be essential; understanding these will likely be essential for understanding not only some of the proximate causes for entrenched disadvantage in many Indigenous communities, but also how the strengths and opportunities arising from fishing values could inform and empower efforts by Indigenous communities to grow their health, wealth and wellbeing on their own terms.

In terms of further required research, chief priorities should be:

1. Research with additional communities to collate more detailed local fishing values sets, and to add to and verify the broad baseline set established here. While there are likely to be a large number of shared values, these may belie significant diversity in their expression, detail, and perceived importance.

2. Specifically, additional research into the fishing values, barriers and aspirations of Torres Strait Islander and freshwater Aboriginal communities, and how these may differ from those of the saltwater Aboriginal communities that were the focus of this project.
3. Building from the first two priorities, more research is needed to quantify customary fisheries. This includes both the size of customary fisheries (total catch and effort) and determining the total monetary value of customary fisheries, encompassing both economic and non-economic values (for instance, the estimated direct and indirect benefit to the wider economy of the cultural, social and health benefits of customary fishing).
4. These would open the door to further investigations into the social return on investment from different methods of accommodating customary fisheries within overall fisheries management frameworks, including Indigenous commercial fisheries which incorporate customary elements.

Project participants from the three case study regions have provided numerous recommendations on fisheries management changes, through both the project interviews and at meetings. Issues arising from the management of fisheries and coastal environments were a common thread through all case studies. The recommendations of interviewees and project meeting participants can be broadly summarised in four main points:

1. There must be greater recognition of the value and importance of customary fishing practices to Indigenous communities by fisheries managers, and legal restrictions on them should be eased or removed in consultation with customary fishers and their communities.
2. Fisheries managers must acknowledge that customary fisheries are successfully self-managed within many Indigenous communities in line with local cultural laws and practice, and this should be expanded and formalised through appropriately resourced Indigenous sea ranger programs or similar, in both northern and southern Australia.
3. There must be more opportunities for input from Indigenous peoples and knowledges into the management of their fisheries and coastal environments, and greater involvement in and control over decision making and enforcement.
4. There need to be more genuine opportunities for Indigenous people to engage in commercial fishing and related industries, including flexible options which can accommodate unique Indigenous fishing values and ways of fishing, which is not the case within most contemporary licensing and management paradigms.

While in most jurisdictions there exists at least some legal provisions in regards to the first recommendation (although affected Aboriginal communities might argue that so far they are inadequate or incomplete), the other three still require much more work in most jurisdictions. In some cases elements of these recommendations have already been implemented; much work will still be required, but fisheries managers in most states and territories will not be starting from scratch. Research conducted in line with the priorities spelt out above will be essential for informing these negotiations and creating mutual understandings to proceed from.

Getting to these outcomes will require extensive free, prior and informed consultation and good faith negotiation between governments, fisheries managers, local Aboriginal and Torres Strait Islander communities, and non-Indigenous recreational and commercial fishers. Open and genuinely two-way communication between fisheries managers and Indigenous communities on values will be necessary, but in many instances this will require a difficult departure from established conduct for both parties. Case study partners in NSW noted that they have achieved limited success in communicating with local fisheries and marine park managers on values, but that they continued to encounter issues around their values not being fully understood or taken seriously enough. They believed that there would be

little further improvement until high-level decision makers in the relevant agencies developed a decent understanding of their values, and this was reflected to staff on the ground in policy and instructions. This suggests that two-way communication will be most effective if it takes place at both the local and organisational level.

Extension and Adoption

This project had a large number of stakeholders, interested parties and target audiences, due to the nature of the research itself and the broad scope of the project objectives. Throughout the life of the project there has been considerable communication and outreach. Details for all project outputs can be found in the **Project materials developed** section.

Rod Kennett and Tran Tran from AIATSIS, and Wally Stewart, Andrew Nye and John Brierley from the NSW AFRG attended the Indigenous Peoples and Saltwater/Freshwater Governance for a Sustainable Future workshop held at the University of Tasmania in February 2016. There they presented on the objectives of the project and the fisheries management issues apparent in each case study region. This was followed by a panel discussion on the effects of current regulatory approaches on cultural fishers and their communities on the South Coast of NSW.

Rod Kennett and Hayley Egan attended the third FRDC Indigenous Fisheries Research, Development & Extension Stakeholders Forum in 2016, where they spoke on the need for the project and how it fitted into previously identified Indigenous fisheries research and development priorities.

Preliminary findings from the NSW South Coast case study contributed to a journal article written by the project team, published in the Australian Environment Review in 2016, on native title fishing rights and the consequences of attempts to regulate customary fishing practices in NSW.

An online exhibition, titled *Living Off Our Waters*, was published in June 2017 as public resource on the project and Indigenous fishing values more generally. It is hosted on the AIATSIS website, and includes information on the origins and objectives of the project, brief overviews of Indigenous fishing and the legal basis for Indigenous fishing rights in Australia, and background to and findings from each case study region. It also features both historical and contemporary photographs related to Indigenous fishing, sourced from case study partner organisations, the AIATSIS collection, and other institutions. The online exhibition is intended as an educational resource for the general public that is accessible and requires no prior knowledge of Indigenous fishing or values-based research, with the aim of increasing public awareness and understanding of the importance of fishing and access to fisheries to Indigenous communities.

The online exhibition was unveiled at the National Native Title Conference 2017 in Townsville. Delegates were able to view the exhibition on computer tablets at a project stall for the entire duration of the conference. The exhibition was officially launched by AIATSIS Council member Steve Kinnane in a session at the conference, which was followed by a presentation from Rod Kennett, Luke Smyth and representatives from all three case study regions on the preliminary findings of the project and the importance of fishing to Indigenous communities. The online exhibition received overwhelmingly positive feedback from conference delegates, and Senator the Hon. Nigel Scullion, Minister for Indigenous Affairs, and the Hon. Justice Debra Mortimer of the Federal Court both expressed interest in the project and its findings.

Project findings have contributed to two submissions to public inquiries relevant to Indigenous customary and commercial fishing. These were the AIATSIS submission to the Productivity Commission's 2016 inquiry into regulation of the marine fisheries and aquaculture sectors, and a submission by Hayley Egan and Luke Smyth to the NSW Marine Estate Management Authority on its draft marine estate management strategy for 2018-2028. The second was submitted at the request of community members at the South Coast extension and adoption meeting in December 2017. Both submissions stressed the importance of recognising and accommodating Indigenous values in fisheries in regulation and management, particularly the need to recognise the social, economic and health values of coastal Indigenous communities, in addition to cultural values.

Communication of project findings with case study communities was primarily via report back meetings and community reports. Report back meetings with communities included presentation of the research results, as well as extension and adoption discussions.

AIATSIS researchers were invited to present the interim findings of the Crocodile Islands case study at a meeting organised by the Crocodile Islands Rangers in Milingimbi in July 2017. This meeting was held to discuss ways to support the nascent Yolŋu commercial fishing industry in the region. Organisations with representatives at the meeting included the NT Department of Trade, Business and Innovation; the NT Department of Primary Industry and Resources; the NT Department of the Chief Minister and Cabinet; the Department of the Prime Minister and Cabinet; the Northern Land Council; Arnhem Land Progress Aboriginal Corporation (ALPA); Milingimbi School; and Many Rivers Microfinance. Around 20 community members also participated. The interim results informed the discussion of potential pathways and opportunities for the Yolŋu commercial fishers.

The AFRG organised a community meeting, styled as an ‘Aboriginal Fishing Rights Summit’, at Central Tilba, NSW, in December 2017, to discuss recent developments relevant to cultural fishing in the region. AIATSIS researchers presented the preliminary results to the approximately 40 community members in attendance. Also present were representatives from NSW Marine Parks, the NSW Department of Primary Industries, NSW Aboriginal Land Council and Oxfam Australia. AIATSIS researchers received extensive feedback on the results which was incorporated into the final case study and project reports. Attending community members also crafted and agreed upon a number of formal statements and recommendations regarding the recognition of cultural fishing and the management of South Coast fisheries.

The results presented at the Tilba meeting and the discussion and recommendations they generated prompted Katungul Aboriginal Community Corporation and Medical Service to apply for funding for more Indigenous land and sea rangers for the region. Katungul’s CEO attended the meeting and recognised that fishing values and barriers are important cultural and social determinants of health for many South Coast Aboriginal communities.

At the time of writing, it had not yet been possible to hold an extension and adoption meeting for the Far West Coast SA case study. Arrangements have been made to hold this meeting at the 2018 National Native Title Conference, during June in Broome.

A final community report was produced for each case study region. The reports included summaries of the research process and findings and, where possible, key points arising from the report back meetings. The South Coast NSW final community report has been used as a supporting document in an AFRG application for funding to the Aboriginal Fishing Trust Fund, to run workshops with the Wallaga Lake Village Men’s Group on making, maintaining and setting a gillnet for communal use.

During the course of the research the project team also collaborated with and advised other researchers in related fields. Through the South Coast NSW case study the project team supported engagement between South Coast Aboriginal communities and researchers from the University of Wollongong on the topics of marine resource use and management. The most recent example of this was relaying information between members of the AFRG and university’s Launching a Blue Economy team, and putting them in contact in December 2017. Conversations between the two groups are ongoing at the time of writing but there was potential for the AFRG to access resources through the partnership that could support local commercial fishing aspirations (such as assistance with business planning).

The project team regularly corresponded with independent anthropologist Dr Bentley James, who has worked with Crocodile Islanders on Yan-nhaŋu culture and language projects for nearly three decades. Information provided by case study participants and Dr James highlighted the historical importance of commercial fishing in the region, of which there was little written evidence aside from a handful of brief primary sources. Under contract from AIATSIS, Dr James produced short histories

of the commercial fishing and crabbing industries, based on his own field notes, already existing records and interviews he conducted with those who were involved in the industries and their descendants. Elements of these histories were incorporated into the project literature review and the online exhibition.

Project coverage

Crawford, A 2017, 'Indigenous fishing values', *FISH: Fisheries Research & Development Corporation News*, vol. 25, no. 2, pp. 30–31.

URL: <http://www.frdc.com.au/-/media/Fish-FRDC/FISH-Magazine/FISH-PDF/FISH-Jun-2017-cover/FISHJUN17.ashx?la=en>

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Smyth, L, Stewart, W, Stewart, Y, Butler, T 2016, 'Project update: Aboriginal fishing values on the New South Wales South Coast', *Native Title Newsletter*, AIATSIS, August 2016, pp. 18-19

URL: <http://aiatsis.gov.au/publications/products/native-title-newsletter-august-2016>

Magazine article Update on project progress, following the completion of fieldwork for the South Coast case study and the 2016 National Native Title Conference.

Smyth, L 2016, 'AIATSIS at the East Arnhem Ranger Forum', *Native Title Newsletter*, AIATSIS, August 2016, p. 12.

URL: <http://aiatsis.gov.au/publications/products/native-title-newsletter-august-2016>

Magazine article Project is mentioned in relation to discussions the project team had with the Crocodile Islands Rangers at the East Arnhem Ranger Forum.

Boyer, A 2016, 'Bridge-building needed for Indigenous fisheries research', *FISH: Fisheries Research & Development Corporation News*, vol. 24, no. 2, pp. 32–33.

URL: <http://www.frdc.com.au/-/media/Fish-FRDC/FISH-Magazine/FISH-PDF/FISH-Jun-2016-cover/FISH-Jun-2016.ashx?la=en>

Magazine article Article on the Third National Indigenous Fisheries Forum which talks about this project and others in the context of building relationships between researchers and Indigenous communities.

Gorton, S 2016, 'Aboriginal cultural fishing rights group writes to PM', *Narooma News*, 4 March 2016.

URL: <http://www.naroomanewsonline.com.au/story/3768955/aboriginal-cultural-fishing-rights-group-writes-to-pm/>

News article Short news article reporting that the AFRG had written to the Prime Minister in regards to the benefits of and barriers to cultural fishing. Briefly mentions that the AFRG is working with AIATSIS on a 'study on cultural fishing benefits'.

Glossary

Term	Variant	Meaning	Usage
Balandā		White or non-Indigenous person	Northeast Arnhem Land (Dhuwal)
Bäpurru		Clan	Northeast Arnhem Land (Dhuwal)
Bimbilla	Bimbler	Sydney cockle, <i>Anadara trapezia</i>	Coastal NSW
Galda maru		Blue swimmer crab, <i>Portunus armatus</i>	Far West Coast SA (West Coast Talk)
Garkuyi		Bluetail mullet, <i>Moolgarda burchanani</i>	Northeast Arnhem Land (Dhuwal)
Guya		Bony finfishes, class <i>Actinopterygii</i>	Northeast Arnhem Land (Dhuwal)
Larratjatja		Barracuda, <i>Sphyraena barracuda</i>	Northeast Arnhem Land (Dhuwal)
Longbum		Mud creeper, <i>Telescopium telescopium</i>	Coastal NT
Malmuṇu		Blue threadfin, <i>Eleutheronema tetradactylum</i>	Northeast Arnhem Land (Dhuwal)
Maypal		Most edible marine invertebrates; shellfish	Northeast Arnhem Land (Dhuwal)
Moona ma	Moona mar	Giant limpet, <i>Scutellastra laticostata</i>	Far West Coast SA (West Coast Talk)
Ratjuk		Barramundi, <i>Lates calcarifer</i>	Northeast Arnhem Land (Dhuwal)
Rom		Yolŋu law, custom and religion	Northeast Arnhem Land (Dhuwal)
Wanna ma	Wanna mar	Marine and coastal foods; seafood	Far West Coast SA (West Coast Talk)
Wanjarr		Ancestral creator beings; totems	Northeast Arnhem Land (Dhuwal)

Project materials developed

Project web page

AIATSIS, 2018, *Livelihood values of Indigenous customary fishing*, AIATSIS, <http://aiatsis.gov.au/research/research-themes/land-and-water/livelihood-values-indigenous-customary-fishing>.

Inception report

Kennett, R, Tran, T, Heffernan, T & Strelnikow, L 2016, *Livelihood values in Indigenous cultural fishing: Report of a meeting with Indigenous cultural fishers of the south coast of NSW*, AIATSIS, Canberra, http://aiatsis.gov.au/sites/default/files/docs/research-and-guides/Land-and-water/frdc_nsw_september_report_final.pdf.

Journal article

Tran, T, Smyth, L, Kennett, R, Egan, H, Stewart, Y, Stewart, W, Brierley, J, Nye, A & Butler, T 2016, 'What's the catch? Aboriginal cultural fishing on the NSW South Coast', *Australian Environment Review*, vol. 31, no. 5, pp. 182–185.

Submission

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Submission

Smyth, L & Egan, H, Submission to the NSW Marine Estate Management Authority, *Draft Marine Estate Management Strategy 2018-2028*, 21 December 2017.

Online exhibition

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Appendices

Appendix 1: Researchers and project staff

Name	Organisation	Position
Nilanthi Abeysekara	AIATSIS	Research officer
Solodi Butuhnguliwuy	MOPRA	Community research project officer
Doreen Collins	MOPRA	Community research project officer
Hayley Egan	Barefeet	Lead consultant
Wayne Haseldine	FWCAC	Community research project officer
Tim Heffernan	AIATSIS	Research officer
Dr Rod Kennett	Questacon (formerly AIATSIS)	Research fellow, project lead (to June 2017)
Liz Koschel	AIATSIS	Project officer
Kelly Miller	FWCAC	Community research project officer
Gerard Morgan	MOPRA	Community research project officer
Luke Smyth	AIATSIS	Research officer, project lead (from July 2017)
Yvonne Stewart	AFRG / AIATSIS	Community research project officer
Dr Tran Tran	AIATSIS	Research fellow

Appendix 2: Research instruments

2.1: Crocodile Islands short questionnaire



Livelihood values of Indigenous customary fishing Short Interview

Darra ga djältirri guyalil ga maypalil bili:

I go fishing and collect shellfish because I want to:



Manymak

Strongly agree



Ganga manymak

Agree



Yaka marngi

Not sure



Yaka

Disagree



Yakan yan

Strongly disagree

		Strongly agree	Agree	Not sure	Disagree	Strongly disagree
Gurrupan		Share				
Gurrupanmirr		Trade / exchange				
Gurrupan doy		Sell for money				
Nhini dawala		Be healthy				
Rrambanji gurrutumirr		Be with family				
Rrambanj lundumirriju		Be with friends				
Djäl ganajumirr		Be alone				
Datha maram		Get tucker				

		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Nhina ḡarra ga dhiyan rom'dhu		Follow my law					
Marŋgi gurrupan djamarrkuliny		Teach kids					
Marŋgithirr		Learn					
Limurr wakiryun wāŋajur		Be on my country					
Walŋagunha mirr		Get medicines					
Dupanmirr competitions		Win competitions					
Wakalgu		Have fun					
Rumbal layun		Relax					
Wakiryun		Be outdoors					

Yolŋu name	Interviewed by
English name	Interview location
Age	Date
Place of residence	Phone
Nation or clan	Email

2.2 South Coast NSW and Far West Coast SA short questionnaire



Livelihood values of Indigenous customary fishing Short Interview

How important are the following reasons for fishing?

	Very Important	Important	Unsure	Not very Important	Not at all Important
To follow cultural rules about fishing					
To teach others and pass on knowledge					
To be on your country					
To assert your rights					
Fishing for food					
For medicinal reasons					
Fishing for food					
For medicinal reasons					
Fishing to barter/trade					
Fishing to sell for money					
To be healthy					
To be with your family					
To be with your friends					
To be alone					
Fishing competitions					
Fishing for sport					
To relax and unwind					
To be outdoors					

Interviewee _____

Name _____

Age _____

Place of residence _____

Cultural group _____

Phone number _____

Email _____

Are you willing to take part in a longer interview, either by yourself or with family?

YES

NO

If yes, what day and time usually suits you?

Sun	Mon	Tue	Wed	Thu	Fri	Sat

Interview details _____

Interviewed by _____

Location _____

Date _____

Morning

Afternoon

Evening

2.3 Crocodile Islands longer interview plan



Livelihood values of Indigenous customary fishing Group interview questions

1. Nhaku nhe lika guyalil ga maypalil marrtji?
Why do you go fishing and collect shellfish?
2. Nhaliy waluw nhe dhu marrtji guyalil ga maypalil?
How do you know when to go fishing?
3. Nha ḷuŋu dhukarr limurru dhu marrtji guyalil ga maypalil?
What are your rules/laws about fishing?
4. Nhaltjan nhe lika guya ga maypal buma?
How do you go fishing?
5. Nhaltjan nhe ga guyanya warrpamgu marrtji'nharaw guyalil ga maypalil?
How do you feel about other people coming and fishing here? Like balanda, Yolŋu from other communities, and big commercial boats?
6. Nhaliy nhunany ga gularam marrtji'nharaw guyalil ga maypalil ga nhaliy nhunyu ga dhälthirri nhunhi nhe dhu marrtji?
Is there anything that stops you from fishing, or makes it hard for you when you do?
7. Nha nhuŋu manymak nhe dhu djamarlkuliny marnŋi gurrupan guyaw?
Why is it important to teach kids about fishing?
8. Do you have any feedback for us about the interview? Is there anything you want to ask us or tell us? Is there anything we didn't talk about that you think we should?

2.4 South Coast NSW and Far West Coast longer interview plan



AIATSIS

AUSTRALIAN INSTITUTE OF ABORIGINAL
AND TORRES STRAIT ISLANDER STUDIES

Livelihood values of Indigenous customary fishing

Interview

Interviewee	Interview details
Name	Interviewed by
Age	Location
Place of residence	Date
Nation or clan	
Phone number	
Email	

Why is fishing important?

1) Why is it important you are able to fish on your country?

2) How do you feel when you are out fishing?

3) How would you feel if you couldn't fish anymore? What would happen?

4) What would change if you could fish wherever you wanted?

5) What is stopping/would stop you from fishing?

6) Where do you usually fish? [Refer to map if needed]

How important are the following reasons for fishing?

	Very important	Important	Unsure	Not very important	Not at all important
To follow cultural rules about fishing					
To teach others and pass on knowledge					
To be on your country					
To assert your rights					
Fishing for food					
For medicinal reasons					
Fishing to barter/trade					
Fishing to sell for money					
To be healthy					
To be with your family					
To be with your friends					
To be alone					
Fishing competitions					
Fishing for sport					
To relax and unwind					
To be outdoors					

Sharing, trading, bartering and selling catch

8) Do you share your catch with other people?

9) Where does your catch go first?

10) How many people do you usually share your catch with?

11) Do other people share their catch with you?

12) Why is sharing your catch important to you? What's the most important reason?

13) Do you trade or barter part of your catch for other goods, or in return for work or help?

14) Do you ever do or trade things in return for part of someone else's catch?

15) Why is bartering or trading your catch important to you? What's the most important reason?

16) Do you have a commercial fishing licence?

17) Do you ever sell some or all of your catch for money? Where does it go?

18) Why is selling your catch important to you? What is the most important reason?

Rules about fishing

19) How do you know when to fish?

20) How do you know where to fish?

21) How do you know you have rights to fish?

22) What happens in your community when you do not follow these rules?

23) What are the rules you have to follow when you fish?

24) Does everyone in your community follow these rules?

25) What's the most important thing to learn/teach about fishing?

26) Do you teach others how to fish?

27) What are the rules about different species?

Abalone:

Oysters:

Bimbellas/pipis:

Mullet:

Whiting:

Salmon:

Prawns: _____

Lobster: _____

28) Are you willing to participate in a group interview?

Thank you for participating.

NB: The Far West Coast SA interview guide was identical to the South Coast NSW guide above, except that the species listed in question 27 were abalone, oysters, cockles, mullet, whiting, salmon, lobster, razor fish, limpets, crabs, gummies and rays.

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