

# Seven pearls of wisdom: Advice from Traditional Owners to improve engagement of local Indigenous people in shellfish ecosystem restoration

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**Figure 1.** Shellfish Reef Restoration Network meeting attendees, including Traditional Owners – November 2016. Photo credit Marie Roman. [IColour figure can be viewed at wileyonlinelibrary.com](http://www.wileyonlinelibrary.com)

Oysters, mussels and other shellfish are culturally and economically important resources for coastal communities globally. In Australia, Aboriginal and Torres Strait Islander peoples have engaged in the harvest, consumption, ecological management and trade of shellfish and shellfish products for millennia (Bailey 1975; Beck *et al.* 2011; Alleway & Connell 2015). Shellfish ecosystems have been severely reduced in Australia since European settlement through overharvest using destructive fishing practices, pollution and disease (reviewed in Gillies *et al.* 2018, 2015). There is growing interest in the restoration of shellfish ecosystems in Australia to bring back a vastly reduced natural ecosystem, and the ecosystem services they provide such as providing habitat for other species, water filtration and shoreline protection (Gillies *et al.* 2015).

Aboriginal and Torres Strait Islander peoples are important landowners and managers of coastal land and sea Country in Australia through native title bodies, cultural and natural resource management organisations and other corporations.

Shellfish restoration practitioners can benefit from Traditional Owner's knowledge of ecological and socioecological processes. Marine scientists and managers have expressed willingness to improve engagement with Traditional Owners, but often do not know where to start (Hedge 2017). Traditional Owners can also, depending on access and relationships, benefit from better engagement with research institutes, conservation groups and restoration practitioners. Mutual benefits include acquiring further knowledge, understanding and skills relating to contemporary restoration techniques. As the most likely project proponents and usually those with more institutional funding, the onus often lies largely with research institutes, natural resource management agencies, conservation groups and consultants, to act early and to engage with the relevant Traditional Owners during the preplanning and early stages of restoration projects.

At a meeting of the Australian Shellfish Reef Restoration Network (May, 2016; <http://www.shellfishrestoration.org.au>), restoration practitioners and researchers committed to engaging Traditional Owners in shellfish ecosystem restoration. However, network members expressed a lack of experience in how to initiate and continue involvement with Traditional Owners. Here, we provide seven 'pearls of wisdom' (engagement advice) directly from Traditional Owners, developed as part of a one-day workshop. This advice was generated for shellfish restoration practitioners but is of value to the broader marine and terrestrial habitat restoration community (Fig. 1).

## Traditional Owner Shellfish Reef Restoration Workshop

In November 2016, on Bribie Island in southeast Queensland, 21 Traditional Owners from around Australia and New

Zealand who are interested in, or directly involved with shellfish ecosystem restoration projects, came together for the workshop on Indigenous engagement in shellfish restoration. The purpose was to identify Indigenous aspirations and collaborative opportunities, and to gather advice about working in partnership. Participation included Indigenous people from Aotearoa (New Zealand), and Australian Traditional Owners from Narungga (South Australia), Mamu and Rainforest Aboriginal peoples (far north Queensland), Woppaburra (central Queensland) and south east Queensland groups Yawaalaraay, Bunya Bunya, Quandamooka, Joondoburri and Kabi Kabi on whose Country, the workshop was held. We pay our respects to their Ancestors, the Elders and Indigenous people as the continuing traditional knowledge holders and custodians of Country including 'seas, rivers, lakes, tidal inlets, bays, estuaries, harbours or subterranean waters and to the bed or subsoil under, and airspace over those waters' (Cape York Land Council Aboriginal Corporation, 2017).

The seven wisdoms about engagement, which in line with the nature of workshop we called the 'Seven Pearls of Wisdom', were generated through a deliberate process of presentations, facilitated discussions, community-based training-related focus groups (Kelly 2001) and participant prioritisation, and then consolidation to assist their application (Figs 2 and 3). The outcomes included development of the 'Seven Pearls of Wisdom' presentation to the broader Shellfish Reef Restoration Network and a video capturing the workshop process and key learning outcomes ([https://youtu.be/h0dS\\_ikWx3M](https://youtu.be/h0dS_ikWx3M)).

### **Seven Pearls of Wisdom About Working in Partnership Between Indigenous People, Research Institutes, Conservation Groups and Restoration Practitioners**

The seven wisdoms were derived through a community-based training approach that explored and processed the individual and collective Indigenous experience. Each



**Figure 2.** Traditional Owner Shellfish Restoration Workshop – November 2016. Photo credit Ian McLeod. [Colour figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]



**Figure 3.** Traditional Owner Shellfish Restoration Workshop attendees. Photo credit Marie Roman. [Colour figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

independently, and collectively, is necessary elements in better engaging local Indigenous people. The approach demonstrated how varied local circumstances translate into unique entry points and

pathways through the seven steps, and different outcomes (Fig. 4).

The seven pearls of wisdom can be used to facilitate mutually productive partnerships between Indigenous people, research



**Figure 4.** The seven pearls of wisdom generated by Traditional Owners. [Colour figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

institutes, conservation groups and restoration practitioners. By recognising and acknowledging Country, and Indigenous peoples' rights and responsibilities (1), scientists can bring awareness of past struggles into future projects. By co-designing and co-managing restoration projects (2), with a particular focus on local outcomes and employment opportunities (3), Traditional Owners and scientists can work together to develop projects and programmes, which encourages mutually beneficial outcomes. By recognising the importance of mapping of coastal resources and the role of traditional knowledge in describing historical and current conditions (4), we can encourage knowledge sharing and create a record of local traditional knowledge. If Traditional

Owners are engaged early and for the long-term (6) and we generate shared visions of restoration and the likely benefits (5) in projects, we can ensure that projects have the lasting support of traditional owners. Finally, if projects recognise the connections between land and sea in improving coastal water quality (7), they are more likely to have positive ecological outcomes.

### **Authors' Reflection on the Workshop and Traditional Owners' Engagement in Shellfish Ecosystem Restoration**

Since European settlement, Indigenous people have observed and sustained

enormous changes to their Countries and their traditional cultures including the body of traditions, observances, customs and beliefs as applied in relation to particular persons, sites, areas of land, things or relationships (North Queensland Land Council Native Title Representative Body Aboriginal Corporation 2010). In recent decades, Traditional Owners have advocated for recognition of their custodial responsibilities and rights to co-manage their traditional estates across land and sea Country in Australia.

Improved engagement between scientists, managers and Traditional Owners in habitat restoration from the outset of project development has the potential to benefit all parties. Traditional Owners may

**Table 1.** Online resources covering a range of Indigenous engagement topics identified during the TO workshop by participants

Guidelines	Topic
AIATSIS – Guidelines for Ethical Research in Australian Indigenous Studies	Ethical research – broad applicability
Ask First – A guide to respecting Indigenous heritage places and values	Indigenous heritage places and values
NHMRC – Ethics and Values – Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research	Focus on human health but has broad applicability
Our culture – Our future. A report on Australian Indigenous cultural and intellectual property rights	Cultural and intellectual property rights – including data and information. United Nations Development Group
Guidelines on Indigenous Peoples' Issues.	Indigenous rights
UNESCO Policy on engaging with Indigenous peoples – in development	Currently a draft policy on Engaging with Indigenous Peoples – seeks to outline a house-wide approach that will guide all of UNESCO's programs

gain greater recognition and involvement in traditional coastal management and Indigenous sea country management through activities such as marine spatial planning, on-ground restoration works, shellfish aquaculture and monitoring. Facilitating greater Indigenous involvement in marine habitat restoration can occur through ranger programmes, fishing and aquaculture enterprises, tourism operations and Indigenous land owner corporations. Shellfish restoration practitioners and managers can benefit from Traditional Owner's knowledge of ecological processes. Local knowledge of the ecological and socioecological history of an area is critical to understanding historical baselines and restoration objectives. As key stakeholders in coastal and marine management, we hope the advice of the Indigenous people through the *Seven Pearls of Wisdom* and accompanying resources encourages more project managers and practitioners to engage Indigenous peoples early in the process of project development and planning and embed active partnership approach for the benefit of all involved.

### Further resources

The workshop participants identified that there is a range of existing guidelines and resources that practitioners may find useful for better engaging local Indigenous people

in marine habitat restoration (Table 1). These include topics such as Indigenous heritage place and values, Indigenous intellectual property and ethics.

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