

Caring for Saltwater Country

Indigenous peoples are taking a lead in managing marine and coastal ecosystems in tropical northern Australia

The coastal and marine environments of tropical northern Australia are amongst the most pristine in the world. Spanning some 4,500 km of coastline, they support high levels of biodiversity, intact habitats, including some of the world's largest

Indigenous Australians suffered terribly through the often violent European colonization of Australia, with widespread loss of life, language, livelihoods and land ownership. Only in relatively recent times has the British colonial doctrine of 'terra nullius' (empty land) been overturned and indigenous Australians, particularly in northern Australia, begun to gain legal recognition of their customary estates. Some 30 per cent of northern Australia has now been returned to indigenous ownership and some 462 legal claims extending across 80 per cent of northern Australia are still to be resolved.

Some 30 per cent of northern Australia has now been returned to indigenous ownership...

and most diverse mangrove forests, coral reefs and seagrass meadows, and robust populations of globally threatened species such as dugong and marine turtle as well as numerous valuable and comparatively well-managed fisheries.

Northern Australia is also home to some of the oldest and most intact indigenous knowledge and cultural management systems on the planet—developed and refined over some 50,000 years of continuous indigenous occupation. This long tradition of custodianship means that indigenous Australians possess a detailed body of environmental knowledge and inter-connected spiritual and cultural relationships with their land and sea estates. Indigenous Australians refer to the reciprocal relationships that underpin their use and management of their lands and resources as 'caring for country'.

Recent legal decisions have also recognized rights of coastal indigenous peoples (often called saltwater people) over their traditional coastal and intertidal estates (commonly referred to as 'sea country' or 'saltwater country' by saltwater people). In most cases, the rights recognized, which include rights to access and extract water for non-commercial purposes, and to fish, hunt and gather, are non-exclusive (that is, they do not grant the right to exclude other users of saltwater country). However, the High Court of Australia's decision in the landmark Blue Mud Bay case (2008) recognized exclusive rights to the intertidal zone adjacent to aboriginal-owned land in a section of the Northern Territory.

Legal decision

The practical ramifications of this decision are still unfolding, but as a legal decision, it significantly

increases the power of some aboriginal communities to manage their coastal estates by controlling access and commercial use.

In historical times, the property ownership rights of saltwater people across northern Australia were reflected in trading relationships with Macassan fishermen from Sulawesi, Indonesia, who sailed to Australia to harvest saltwater resources, especially *trepang* (sea cucumber or *bêche-de-mer*). The Macassan fishermen brought to Australia iron tools and the technology for making canoes (*lippa lippa*) in exchange for rights to harvest *trepang* and to trade for other items such as turtle shell. The trade (indeed Australia's first export industry) is believed to have originated in the 1670s but was effectively finished in 1906 when the Australian government (which had regulated the trade since the 1800s) ceased issuing licences to Macassan fishermen. The annual arrival of the Macassans had been an important event for saltwater people and many long-lasting family bonds were formed—including indigenous Australians travelling back to Sulawesi with the visitors. In recent times, the issue of illegal, unreported and unregulated (IUU) fishing by foreign vessels and the poaching of resources such as sharks, turtles and trochus shell have altered the relationship between Australian saltwater people and their northern neighbours. While acknowledging the historical relationships, saltwater people are looking to protect their resources from illegal and unsustainable foreign fishing that is depleting their resources and conducted without appropriate cultural protocols being observed.

Today, much of tropical northern Australia remains very remote and sparsely populated (around 0.14 people per sq km). Towns and communities are often many hundreds of kilometres apart, and seasonal monsoonal rains and subsequent flooding restricts movement on a limited network of unsealed roads and bush tracks. Travel is often by small aircraft,

especially in the monsoonal wet season. This remoteness means that many indigenous Australians continue to rely on wild-caught and collected foods, and fishing and hunting are important subsistence economic activities. Customary fishing and hunting (legally defined in Australia as being for subsistence economic, not commercial, purposes) not only provide food but fulfil cultural needs around the ceremonial use of resources. They also provide an important vehicle for the intergenerational transfer of knowledge. A complex set of cultural rules regulates where and when customary fishing and hunting takes place, the tools used, species taken and catch sizes—analogueous to the management regulations of commercial and recreational fishing. Cultural laws place a strong focus on avoiding waste and sharing resources with kin and the recognized owners of the hunting or fishing grounds. While aboriginal peoples' rights to hunt and fish are legally recognized, commercial fishing and aquaculture activities can have an impact on indigenous peoples' ability to access areas traditionally used to harvest marine resources. For example, saltwater people in the north Kimberley region of northwestern Australia are deeply concerned that pearl farm leases may block

NAILSMA.SMUGMUG.COM



Djelk Rangers patrol the beaches and waters off the Maningrida coast in the Northern Territory of Australia to remove marine debris

off access to sheltered bays where turtle and dugong are traditionally hunted.

Despite the disastrous impacts of colonization, indigenous Australians retained their strong sense of cultural and spiritual obligations to their lands and seas, and regaining land ownership has allowed people greater opportunities to look after their country and be recognized as the owners and managers of their traditional estates.

A contemporary expression of these long-held indigenous rights and responsibilities is the growing workforce of indigenous rangers employed by indigenous land and sea management organizations across north Australia. Underpinned by traditional belief and knowledge systems, the management activities of indigenous rangers cover a wide range of cultural and natural resource issues, including cultural site maintenance, fire management, weed and feral animal control, biodiversity and habitat mapping and protection, and bio-security and fisheries surveillance. (Bio-security refers to quarantine activities to prevent the introduction of exotic pests and diseases. Australia is

Indigenous community-based ranger programmes in remote localities are indeed the ‘frontline’ managers of north Australia and are often the only environmental management presence. The Djelk Rangers based at Maningrida—a community of about 2,600 mostly indigenous people on the northern Australian coast—is one of the larger and longer-established ranger programmes. Their management activities exemplify the aspirations of indigenous people.

The Djelk Rangers manage and monitor approximately 6,700 sq km, including 2,000 sq km of marine and coastal environments. During 2009-10 Djelk Rangers conducted 214 sea patrols, travelling a staggering 17,000 nautical miles. Marine patrols are also undertaken on behalf of government agencies, and Djelk Rangers have a contract to perform 72 dedicated customs surveillance patrols annually. Their efforts have resulted in a number of convictions for illegal fishing, significantly increasing recognition of the ownership and management authority of local indigenous landholders. The Djelk Rangers also perform marine debris patrols, which include locating and removing ‘ghost nets’ (lost or discarded fishing nets that continue to circulate in currents and entangle and kill fish and wildlife).

On the land, the Djelk Rangers’ management activities include ‘prescribed burning’, which involves regularly burning fuel loads so that large, hot fires late in the dry season, which can devastate both human and ecological communities, are reduced.

Traditional knowledge

The Djelk Rangers participate in the West Arnhem Fire Abatement project, an initiative that pays rangers to reduce greenhouse gas emissions by conducting prescribed burning based on traditional knowledge. Other Djelk Rangers’ land management activities include feral animal culls and monitoring (particularly of Asian

Indigenous Australians have retained their strong sense of cultural and spiritual obligations to their seas...

geographically close to northern neighbours such as Indonesia and Papua New Guinea and hence vulnerable to the introduction of agricultural pests and livestock and human diseases prevalent in those countries.).

Funding for ranger programmes comes from a range of sources, including government programmes, philanthropic and non-governmental organizations, and agreements with industries such as mining, as well as from local community resources and businesses.

water buffalo), weed management, cultural site protection, and biodiversity monitoring.

The Djelk Rangers have also pioneered innovative, small-scale enterprises such as the harvest and incubation of freshwater turtle eggs to produce hatchlings for the pet trade. With licensed approval from government authorities, 500 to 1,000 eggs have been harvested each year since 2000, bringing revenue and creating opportunities for training in research and business management.

The activities of ranger programmes, such as Djelk, reflect the aspirations, values and priorities of local indigenous communities identified through participatory planning processes. Many communities across northern Australia have developed 'sea country' management plans setting out how they want to manage their coastal lands and seas. While sea country plans have no legal standing, indigenous communities are increasingly using their sea country plans and similar planning processes to engage with external stakeholders such as commercial fisheries, government regulatory agencies, researchers and industries such as tourism and mining. The management of fisheries (customary, commercial and recreational) are consistently a high priority in sea country plans, and the zoning schemes and catch management prescriptions proposed by indigenous communities reflect a balance between allowing for commercial activity (most often conducted by non-indigenous interests) while protecting fisheries resources for local indigenous people.

Indigenous Australians across north Australia are united in their aspirations for greater control and better management of their land and coastal estates. They seek new and innovative economic opportunities and livelihood options such as ranger programmes, which are based on caring for country obligations, and that will provide sustainable alternative futures for demographically young and growing populations in remote locations across



Senior traditional owners are an integral part of the Djelk Ranger programme. Young rangers are guided and mentored by their seniors

a vast and sparsely populated region. Their efforts are set in the context of high long-term unemployment, limited economic opportunities, a loss of traditional knowledge and experience as old people pass away, poor health and education outcomes and a 17-year gap in life expectancy between indigenous and non-indigenous Australians.

Recognizing these shared aspirations and challenges, and the value of better co-ordination of indigenous land and sea management and development across north Australia, senior indigenous leaders of major regional indigenous organizations formed the North Australian Indigenous Land and Sea Management Alliance (NAILSMA) in 2001. NAILSMA's mission is to support indigenous land and sea management using strategic approaches to care for country, with an emphasis on practical management by indigenous people across north Australia.

Crucial role

The crucial role of indigenous people in the sustainable management of Australia's lands and seas, and the value of NAILSMA's co-ordinating role is reflected in significant (multimillion dollar) investment by government agencies and philanthropic organizations in a range of natural and cultural resource management programmes across north Australia,

including traditional burning for greenhouse and biodiversity benefits; indigenous participation in freshwater allocation negotiations; inter-generational transfer of indigenous ecological knowledge; threatened species management; indigenous leadership development; and culturally appropriate networking and communication.

NAILSMA also works with government to actively promote policy change relevant to indigenous land and sea management, including advocating for investment such as through the Australian Government's 'Working on Country' (WOC) programme. WOC investment since 2007 has totalled around A\$80 mn and is expected to employ up to 600 rangers by 2010. A related initiative, the Indigenous Protected Area (IPA) programme, funds indigenous communities to declare (formally but legally non-binding) and manage their estates as protected areas. IPAs are consistent with International Union for Conservation of Nature

pollution, bio-security risks and climate change. To meet these challenges, indigenous rangers use both traditional and scientific knowledge and tools (often referred to as 'two-way knowledge' or 'two toolboxes'), often in partnership with non-indigenous scientists and environmental managers to manage their lands and seas. The new knowledge that indigenous rangers generate has enormous potential to fill major data gaps and provide baseline data to assess future change. Through their experiences with managing migratory marine species such as marine turtles and dugong, and tackling north Australia-wide issues such as the management of weeds, feral animals and fire, indigenous rangers recognize the importance of co-ordinated data collection to address landscape-scale issues. Such an approach requires effective information and data management systems that are owned locally and support local decisionmaking, while supporting cross-regional sharing and collaborative decisionmaking.

NAILSMA's initiative called I-Tracker (for Indigenous-Tracker) provides tools and training to assist indigenous rangers to monitor and manage their estates. Using customized CyberTracker® software applications on rugged, waterproof handheld computers, rangers record detailed, geo-referenced information on a wide range of environmental and cultural issues. CyberTracker® software is free and has a large and growing community of users around the world; it has been downloaded over 40,000 times in 190 countries. Using CyberTracker® links Australian indigenous rangers into a global network of similar community-based initiatives. This global network facilitates access to technical expertise and creates opportunities for international exchanges between community-based resource managers.

Standardized application

In collaboration with the Djelk Rangers, GhostNets Australia and government agencies, NAILSMA

Indigenous rangers are resource managers with responsibilities for enormous, remote areas...

(IUCN) protected area categories and are included in Australia's National Reserve System. IPAs in northern Australia are typically many thousand sq km in size and are coastal and inland areas of high conservation value. They represent a significant addition to Australia's protected estate. For example, the Djelk IPA was declared over 6,672 sq km of traditional indigenous estates after more than eight years of consultations with representatives of 102 clan groups.

Indigenous rangers are resource managers with responsibilities for enormous, remote areas that face a growing array of new environmental threats, including new and expanding weed and feral animal populations, changing fire regimes, marine

developed a standardized 'Saltwater Country Patrol' application that is now used by indigenous ranger groups across north Australia. Data collected include biophysical information on live marine animals (including turtles, dugongs and cetaceans); dead or sick animals; boats, including fishing boats and illegal foreign fishing vessels; marine debris, including ghost nets, other quarantine activities, and commercial fishing nets and crab pots.

Using the geographic information system (GIS) functions of CyberTracker®, rangers produce maps and reports that inform local community decisionmaking and that meet requirements of research programmes, government agencies and funding bodies. Regional aggregation of these standardized local data sets has the potential to significantly improve understanding of marine environmental issues at a regional and national scale.

Indigenous rangers and organizations such as NAILSMA are contemporary assertions of long-held traditional indigenous rights and responsibilities. These initiatives are underpinned by a cultural and spiritual worldview that recognizes the importance of careful stewardship and of maintaining healthy country for people and wildlife. Coupled with growing legal recognition of indigenous ownership of Australia's land and coasts, the strengthening of indigenous land and sea management movement represents an optimistic scenario for the future of Australia's saltwater country. 3



A float marking the aboriginal sacred sites at sea.

Protecting and maintaining sacred sites are an essential duty of the Djelk Rangers

For more



nailsma.com.au

North Australian Indigenous Land and Sea Management Alliance

bawinanga.com.au/djelkrangers/index.htm

Djelk Rangers

nrm.gov.au

Caring for Our Country Programme of the Australian Government

ghostnets.com.au

GhostNets Australia

ntgfa.com.au/.../precis-high-court-decision-blue-mud-bay-11-february-2009.pdf

Decision in Blue Mud Bay Case