

Protecting the world's largest green turtle nesting site against climate change

Reducing damage to corals in Keppel Bay



Cover: Snorkellers over Nathan Reef

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Aboriginal and Torres Strait Islander readers are advised that this

publication may contain names and images of deceased persons.

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Great Barrier Reef Marine Park Authority 2-68 Flinders Street PO Box 1379 Townsville Qld 4810

Phone: (07) 4750 0700 Fax: (07) 4772 6093 Email: info@gbrmpa.gov.au

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We are proud to work with the Government of Belize to host the International Coral Reef Initiative for 2012-13. ICRI sees governments, agencies, non profit organisations, and the private sector work together to promote sustainable use of the world's coral reefs and related ecosystems. Visit http://www.icriforum.org/

Chairman's message

The Great Barrier Reef has been in the spotlight over the last several months, and mid-2012 presents a timely opportunity to reflect on this and reaffirm our priorities for the remainder of the year.

There's been a strong focus on the Reef with the World Heritage Centre releasing a State of Conservation Report and draft decision for the World Heritage Committee to consider at their meeting at the end of June.

The State of Conservation report follows the World Heritage Committee last year expressing "extreme concern" about development occurring along the Great Barrier Reef coast.

A World Heritage Centre/ IUCN monitoring mission visited the Great Barrier Reef in March this year to investigate the issues firsthand and to meet with GBRMPA and other reef stakeholders.

Many of the issues raised are not new to us, and have been previously identified in our 2009 Outlook Report. Shipping has also emerged as an issue in recent times.

Over the last three decades, GBRMPA has invested considerably in managing the Reef to build its resilience. This places the Reef in a far better position to withstand these pressures.

Our Zoning Plan, the Reef Rescue initiative, Great Barrier Reef Climate Change Action Plan and a robust joint Field Management Program are among the ways we're building the Reef' health.

We also have a network of schools, councils, farmers, fishers and graziers in our

Reef Guardian stewardship program who are working together today for a healthier Reef tomorrow.

We take our role in caring for one of the most extraordinary places on Earth very seriously. We are pleased the Reef is acknowledged as one of the world's best managed and healthiest coral reef systems.

Our priority for the coming year is to undertake our component of the Strategic Assessment, as agreed between the Authority and the Minister.

This will help us identify the values of the Reef that need protecting, the threats to those values and what we need to do to address them.

I welcome this very important assessment that will help shape the long-term protection and sustainable use of the Great Barrier Reef.

New e-newsletter launched

Our stakeholders and others in the community who care about the Great Barrier Reef are encouraged to sign-up for our new environmentally friendly e-newsletter.

Reef In Brief was launched in May this year as a way to modernise and streamline how we communicate to our wide and geographically dispersed audience in a timely manner.

Reef in Brief provides an ongoing snapshot of the



work being undertaken to protect the Reef, and enables you to dig deeper on the topics that interest you.

From August 2012, *Reef in Brief* signals a new direction for our organisation. It will become our primary newsletter for stakeholders, and *SeaRead* will no longer be produced after this time.

We thank you for your interest in the Great Barrier Reef, and hope you have enjoyed reading our newsletter *SeaRead* over the years.

We encourage you to stay connected with the work being done to protect the Great Barrier Reef by subscribing to our new e-newsletter online at www.gbrmpa.gov.au/mediaroom/reef-in-brief-enewsletter

You can also join our online community who care about the Great Barrier Reef at www.facebook.com/ GreatBarrierReefMarinePark

Russell Reichelt Chairman Great Barrier Reef Marine Park Authority



Protecting Lady Elliot Island Lightstation

The future of historic Lady Elliot Island Lightstation has been secured, with marine managers releasing a comprehensive plan to protect this important heritage site.

The Lady Elliot Island Lightstation Heritage Management Plan outlines how visitors can minimise their impact on the 139-year-old lightstation and the unique natural environment around it.

Andrew Skeat from the Great Barrier Reef Marine Park Authority said the island had a unique place in Queensland's history and the highest seabird diversity of any island within the Great Barrier Reef.

"Lady Elliot Island is treasured by locals and visitors alike, and the Lightstation Heritage Management Plan is important in ensuring the heritage values are preserved," he said.

"An important factor in protecting this valuable heritage place is to foster a culture of understanding and stewardship amongst visitors to the island, so they take care around the site. "Lady Elliot Island is also a valuable nesting site for seabirds and green and loggerhead turtles so it's important that visitors minimise any impact on these treasured species."

The lighthouse built in 1873 is a significant landmark and, along with the island, marks the southernmost point of the Great Barrier Reef.

It was only the third lighthouse built by Queensland authorities and was the first built offshore within the Great Barrier Reef.

The lighthouse was also the prototype for a unique style of lighthouse developed in Queensland and now demonstrates the way such lightstations were developed and changed over time.

The lighthouse forms an integral part of history in aiding navigation along the Queensland coast through the Great Barrier Reef.

The Lady Elliot Island Lightstation Heritage Management Plan is available at www.gbrmpa.gov.au



Lady Elliott Island lighthouse and cottage (undated) *Photo courtesy of AMSA*

Protecting the world's largest green turtle nesting site against climate change



The new fence at Raine Island. Photo courtesy of QPWS

Every year, as many as 14,000 green turtles make their way down the sandy beaches of Raine Island to return to the ocean after laying their eggs during turtle nesting season.

This journey returning to the waters of the Great Barrier Reef was, until recently, a risky one.

As part of a project to protect this endangered species from the impacts of climate change and improve survival, rock ledges were fenced off to stop turtles falling over the edge and dying in the sun as they attempted to return to the ocean.

Great Barrier Reef Marine Park Authority Chairman Russell Reichelt said protecting current nesting green turtles was vital to the future turtle populations on the Reef.

"Climate change threatens to dramatically influence the future ratio of male and female turtles so we're focusing on protecting adult turtles to reduce the risk of species decline," he said.

"Field staff recorded in excess of 50 turtles that died last year by falling over these ledges.

"In comparison, there has only been one death recorded this nesting season since the completion of the fencing project. "This is a significant achievement given mature female turtles have the potential to produce between 4000 and 8000 eggs over their lifetime.

"The sex of green turtles is determined by environmental conditions like the temperature of their nest, with warmer temperatures producing more female hatchlings.

"Based on predictions of warming over the coming 50 years, it's predicted that we'll have far more female than male hatchlings, and this may cause a decline in the population."

The Raine Island Recovery Project, led by Queensland Parks and Wildlife Service (QPWS) Senior Ranger Dr Andrew Dunstan, is a joint initiative between the Great Barrier Reef Marine Park Authority, QPWS and Traditional Owners.

Rangers from QPWS constructed small fences along the edge of the rock ledge as a first stage of the project.

They targeted eroded areas and rock faces where carcasses have been found after turtles had previously fallen on their backs and been unable to free themselves.

Raine Island has the biggest gathering of green turtles in the world, with up to 100,000 turtles recorded in waters around the Island and up to 14,000 nesting on the beach in one night.

Reef Guardian advertisements show big changes on the small screen

The efforts of Reef Guardian fishers, farmers, graziers, schools and councils to help create a better future for the Great Barrier Reef are celebrated in advertisements airing throughout the Great Barrier Reef catchment.

The 2012 Reef Guardian advertisements are on-air throughout the Great Barrier Reef catchment until the end of June.

The advertisements showcase real participants in the Reef Guardian program who tell their own stories of why the Reef is important to them, and why they're passionate about helping to keep it healthy.

GBRMPA Chairman Russell Reichelt said that as the pressures on the Reef mounted it was more important than ever to encourage and celebrate the efforts to care for it.

"The Reef Guardians are an inspiration to the community," Russell said.

"They show us what can be done to make a real difference to the health and resilience of the Reef."

The advertising is designed to raise awareness about threats to the Reef and the value of community partnerships to help care for it, as well as show the positive work undertaken by participants in the Reef Guardian program.

Being part of the Reef Guardian program provides opportunities to share resources and information, and network with environmental and industry partners.

In the 2012-13 Budget, the Australian Government committed to expanding the Reef Guardian Fisher, Farmer and Grazier programs that were launched last year and continuing to support Reef Guardian Schools and Councils.

Meet our Reef Guardian Graziers

The newly produced Reef Guardian Grazier commercial features Kirk and Eiren Smith of Dreghorn Station near Charters Towers.

The 30 second commercial required a full day of filming on location at the 22,000 hectare cattle property Kirk has called home since his father drew the land in a 1963 ballot.

Kirk and Eiren are committed to sharing knowledge and improving land management practices.

"My vision for this property is to demonstrate that we can run an effective cattle property without damaging the environment – indeed we can enhance it," Kirk said.

"We've been able to improve our production while achieving environmental outcomes and that's a win-win."

They have enjoyed a long association with educational, environmental and community organisations including NQ Dry Tropics, James Cook University, and Dalrymple Landcare.

Kirk's son and business partner Eiren said environmental sustainability was a key factor in their business's success.

"The way that we manage this property has continued to change; there has been a huge learning curve," Eiren said.

"There were some degraded landscapes that are now being brought back to their former glory and we now have the skills and infrastructure to continually improve the environment."

GBRMPA works with farmers and graziers like Kirk and Eiren through the Reef Guardian program to promote sustainable farming practices that are helping to minimise and reverse the impacts on the Great Barrier Reef.



Cane farmers open their gates to public

Burdekin cane growers in the Reef Guardian Farmers program recently opened their gates to the public to showcase their innovative farming practices that are helping them to minimise and reverse impacts on the Great Barrier Reef.

The site tour was an opportunity for farmers to share their ideas with industry representatives, interested community members and other growers.

The group visited an irrigation water recycling pit and a re-established wetland before inspecting machinery and technology designed to improve soil management and fertiliser applications.

The tour followed the Reef Guardian Farmer Working group meeting that brought together cane growers from the Mackay, Cairns and Herbert River regions.

Gary Gungu released

Reef HQ Aquarium's Turtle Hospital has celebrated another successful rehabilitation with the release of 'Gary Gungu'.

Traditional Owners and Reef managers released the rehabilitated 25 kg green sea turtle into the Great Barrier Reef Marine Park at Forrest Beach, close to where it was found stranded nearly a year ago.

The turtle was named Gary Gungu out of respect for the Ingham man who reported it and the word for turtle in the language of the regional Traditional Owners.

Gary Gungu was in very poor condition and had floating syndrome when it arrived at the Turtle Hospital in June last year.

Members of the Nywaigi Traditional Owner Group gathered on the beach to celebrate the release of the turtle back into the Great Barrier Reef Marine Park.



Cameraman Bo Dreisig (right) used various filming techniques including an underwater camera to create the new Reef Guardian Graziers commercial featuring Eiren (left) and Kirk Smith (centre)



The Great Barrier Reef is one of the world's best-known visitor destinations, and part of its appeal is the wide range of recreational opportunities it offers.

Each year, there are millions of recreational visits to the Great Barrier Reef Marine Park and this figure is expected to keep climbing.

Australian Government Great Barrier Reef Marine Park Authority

Great Barrier Reef Marine Park Authority Tourism and Recreation Director Chris Briggs said visitors enjoyed a wide variety of recreational activities, taking home a range of experiences.

"People who visit the Great Barrier Reef Marine Park for recreation usually want to learn about and appreciate nature, relax, spend time with friends and family, be active and adventurous, or develop new skills," Chris said.

The most popular waterbased activities in the Marine Park are swimming, boating and fishing. Others come to go snorkelling, sailing, diving and jet skiing.

A number of the islands within the Great Barrier Reef are open to camping.

These sites offer some of the best settings in the world to pitch a tent and watch the natural world go by, as well as being good launching pads for other recreational activities. Not surprisingly, the majority of visits to the Marine Park are by boat, mostly in motorised vessels. The proportion of vessel-based visits has climbed steadily in recent years, from 55 per cent in 2003 to 66 per cent in 2008.

ecreation

In contrast, the use of sailing boats in the Marine Park has decreased slightly over the last decade.

Recreation in the Great Barrier Reef has social, cultural and economic value to Australians.

"The Great Barrier Reef is an integral part of the Queensland and Australian identity," Chris said. Hamilton Island

"The opportunity to enjoy the Marine Park is of enormous social and cultural value to Queensland coastal residents and to Australians more broadly."

On an economic level, recreational use in the Great Barrier Reef catchment contributes an estimated \$153 million to the Australian economy.

Recreation can also enhance people's understanding of the Reef.

"Recreation plays an important role in educating the community about the Great Barrier Reef ecosystem," Chris said.

"Once people have experienced the wonder of the Reef, they get a greater appreciation of its fragility and are more inclined to help in its protection."

The changing face of Reef recreation



Fishing off beach at Masthead Island

Recreational activity on the Great Barrier Reef has changed greatly over the past few decades.

In the 1960s, shell collecting was commonplace while scuba diving was fairly inaccessible.

Fishing was part of growing up for many coastal residents, but boat ownership was not as common as it is today. Fishing equipment was also more basic.

A wealth of information about the changing face of Reef recreation is captured in 'Reef Recollections: An Oral History of the Great Barrier Reef' a research publication of the Great Barrier Reef Marine Park Authority.

Coastal residents interviewed for the book described the Great Barrier Reef as a focal point of recreational activities in the 50s and 60s, just as it is today.

Swimming, snorkelling and fishing were just as popular 50 years ago as they are now, while shell collecting is now much less common.

Diving is now a very popular way for people to see the Great Barrier Reef, supported by high-quality training, equipment and tours. According to the oral histories in Reef Recollections, few people owned aqualungs or scuba equipment 50 years ago.

Former Emu Park man Gordon La Praik said he bought his first aqualung around 1960 when he was 22-years-old, but rarely used it as he had to send the tanks to Brisbane to get them refilled.

There were no wetsuits, no drysuits and no weight belts. Mr La Praik had to wear woollen jumpers tied on to his body with a rope.

Because of the lack of facilities for divers at the time, he remembers it was a "learn as you go" process.

"Nobody knew anything about this diving business... we didn't know even about how to equalise pressure inside your ears. There was no training like they do today; people become aware and then they do something. Back then we jumped in and did it."

Diving took off as a recreational activity in the 1980s as the equipment became more sophisticated and readily available.

In earlier days many people relied on fish as a major



SCUBA diver from 1980s



Shell collection at Keppel Island

source of food, while fishing is now more a recreational sport.

Fishing equipment was much less sophisticated than it is these days. Some people who were interviewed for Reef Recollections described fishing as kids with 'wackos' long cane rods with a bit of line and a hook tied to the end. Bruce Shepherd of Mission Beach grew up in Townsville in the 1940s, a time when boat ownership was less prevalent than it is today.

He remembers people paddling Ross Creek in 'belly tanks' which were old fuel tanks they used as boats. Bruce used them to check his father's crab pots.



on the Reef

Snorkellers in clear blue waters off Low Isles

The Great Barrier Reef Marine Park Authority (GBRMPA) recently developed an overarching framework for managing recreation on the Reef.

The Recreation Management Strategy for the Great Barrier Reef Marine Park is designed to coordinate management of the Reef and to set out in the public arena the management approach of the GBRMPA.

GBRMPA Chairman Russell Reichelt said recreation on the Reef was woven into the social fabric of coastal communities all along the Queensland coast and it generated significant economic value.

"Every year, there's about 14 million recreational visits by local residents plus visits by travellers from outside the Great Barrier Reef region," Russell said.

"It's important for recreational users to be able to enjoy the Marine Park, now and into the future. Spending time on the Reef encourages visitors to care about its protection and long-term future."

Russell said the Recreation Management Strategy would provide marine managers with a roadmap to manage for sustainable recreational activities, for the continued enjoyment of all visitors.

"As the populations of coastal towns continue to expand, there are more recreational visitors to the Reef to boat, fish, sail, dive, snorkel and swim," he said.

"An increase in recreational use has the potential to impact on the ecosystem and we want to encourage visitors to look after the environment during their visit.

"If not properly managed, the Marine Park can be affected by anchor damage to coral and seagrass meadows, littering, boat strikes on marine mammals and turtles, and damage to coral when snorkelling and diving," he said. "The risks are higher near major regional centres."

To protect the Reef from these impacts, the GBRMPA uses tools such as zoning plans, plans of management, public moorings, no anchoring areas, stewardship programs and education.

The strategy was developed in response to the *Great Barrier Reef Outlook Report* 2009. The Outlook Report recognised the importance of recreation for Reef users, but identified the need for an overarching framework for its management and to improve coordination between managing agencies.

The Recreation Management Strategy for the Great Barrier Reef Marine Park is available from www.gbrmpa.gov.au



Diving platform at Lady Musgrave Island



Tourists watch a turtle make its way back to the water after nesting on Heron Island

Adopting Reef-friendly practices will help ensure that future generations of recreational users will be able to enjoy the Great Barrier Reef Marine Park.

The Great Barrier Reef Marine Park Authority's Responsible Reef Practices provides guidelines on how to operate when in the Marine Park.

The practices cover activities like anchoring, diving, snorkelling, whale watching, island visits, boating and yachting.

Great Barrier Reef Marine Park Authority Tourism and Recreation Director Chris Briggs said a 'look but don't touch' approach was generally the best practice for visiting the Marine Park.

"When it comes to activities like diving, snorkelling and whale watching, it's important to respect this unique environment and the animals in it," he said.

"Divers and snorkellers should avoid touching any part of the Reef as well as the animals or plants. In particular, they should keep clear of freeswimming animals such as turtles and sea snakes."

Boat users should take care to anchor away from coral and



Snorkellers in clear blue waters off Low Isles

sensitive areas, use moorings where available and observe no anchoring areas.

Responsible practices around whales include slowing down to minimise the risk of collision where whales have been sighted, and not approaching mothers and calves.

"One of the most commonly sighted whale species in the Great Barrier Reef is the massive humpbacks which swim to the Reef's warmer waters from Antarctica between May and September to court, mate, give birth or rear their calves," Chris said. "It's critical for their continued survival that their 'nurseries' are available to them, free from any harassment which may lead to calf mortality."

Under the Australian National Guidelines for whale watching, no vessels are allowed within 100m of a whale. Only three vessels with negligible wake may be between 100m and 300m of a whale at any one time.

In the Whitsunday Whale Protection Area, no vessels are permitted within 300m.

Good boating practices also include being on the look-out for marine animals such as

dugongs and marine turtles and travelling slowly in areas where they are known to be present.

Boat users should also slow down to minimise the wake when approaching reef edges, shorelines and beaches.

Fishing is one of the most popular recreational activities in the Marine Park and the two guiding principles of Reeffriendly fishing are to observe fishing regulations and take only what you need.

A full set of Responsible Reef Practices for recreational visitors can be found at www.gbrmpa.gov.au Queenslanders have an amazing natural treasure on their doorstep – the Great Barrier Reef. This multiple use area is a vital hub for both recreation and industry and Queensland coastal communities are important stakeholders in protecting and managing the Reef for the future. Throughout the year we will take a closer look at those regions and the challenges they face while also profiling our community partners, the Local Marine Advisory Committees (LMAC). There are 12 Local Marine Advisory Committees along the coast and this regional engagement is vital to the Great Barrier Reef Marine Park Authority (GBRMPA) when making important management decisions.



Reducing damage to corals in Keppel Bay

Voluntary no anchoring areas are proving to be an effective management tool for protecting reefs around the Keppel Islands.

Recent surveys in the Keppel Bay region showed that reefs inside these areas had much less physical damage than before the protection measures were put in place.

Great Barrier Reef Marine Park Authority (GBRMPA) Ecosystem Resilience Manager Roger Beeden said the no anchoring areas were introduced in November 2008 as part of a wider program to build reef resilience.

"We worked closely with the local community to identify sites with a history of severe anchor damage," he said.

"Based on that information, we established no anchoring areas at Humpy Island, Barren Island, Big Peninsula and Monkey Beach Reef."

Staff from the GBRMPA and the Queensland Parks and Wildlife Service assessed anchor damage and reef condition at those sites in December 2008.

Follow up surveys took place in January 2010, June 2011 and February 2012.

Roger said the follow-up surveys showed a marked improvement in coral condition in areas where there was no anchoring.

"It shows us that the no anchoring areas are working that they're an effective management tool to decrease local stress on coral reefs."

Roger said the February 2012 surveys had also assessed damage from last year's Fitzroy River flooding.

"All of the reefs in the Keppel region sustained some damage from the major flood plume, with some reefs more damaged than others," he said.

"Just one year on, several sites are showing signs of recovery. However several reefs are still in a state where the remaining coral is being overgrown by macroalgae, limiting their recovery." Roger said the Keppels region was an excellent example of Reef stewardship in action.

"Measures such as voluntary no anchoring areas help to build the Reef's resilience," he said.

"Healthier reefs are able to recover faster from disturbance and the coral reefs in the Keppel region are already showing signs of considerable recovery."

The recent surveys are part of an ongoing collaboration between the GBRMPA, Queensland Parks and Wildlife Service, industry and the community under the Eye on the Reef program.



No Anchoring Area Keppels

LMACS in focus

Capricorn Coast LMAC

The Capricorn Coast Local Marine Advisory Committee's (LMAC) latest project to clean up Barwells Creek is being well supported by the local community.

LMAC Chairman Mark Jeffrey said the saltwater creek close to town had been used as a dumping ground for old cars and white goods.

"Rockhampton Regional Council has allowed us to dispose of the rubbish free of charge and local car wreckers have assisted with the removal of the cars for free," he said.

"We are getting a couple of the Reef Guardian schools involved to help show them what can be achieved."

The LMAC is also learning about the proposed developments for the Capricorn Coast so they can educate the local community on what is happening in their region.

Gladstone Region LMAC

The area around Wapentake Creek near the southern entrance to Gladstone has been cleaned up as part of the Gladstone Region Local Marine Advisory Committee's (LMAC) Adopt-a-Wetland project.

LMAC Chair Errol 'Blue' Thompson said the area had been identified as an area for public use to educate locals and school age students on the importance of wetlands.

"There isn't anything else like this in the Gladstone region," he said.

"We have partnered with Conservation Volunteers, Gladstone Regional Council and Queensland Alumina and will be putting up signage to highlight the area as an important ecosystem."

Other LMAC projects include educating the community about the issue of marine debris and how to properly dispose of plastic bags, old nets and fishing lines to keep them out of the waterways.

Compliance workshop for Indigenous communities

Aboriginal and Torres Strait Islander peoples attended an information session in Townsville recently about compliance issues in the Great Barrier Reef Marine Park.

The Engaging Indigenous Communities in Compliance workshop looked at Native Title in relation to traditional use activities and zoning in the Marine Park. It also covered how Indigenous communities can identify local compliance issues and how they can report illegal activities in the Marine Park.

Great Barrier Reef Marine Park Authority (GBRMPA) Indigenous Partnerships Group Director Liz Wren said the workshop was an opportunity for Traditional Owners to learn more about how they could protect sea country.

"It gave people a clear understanding of what their Native Title rights are and how they can be exercised within the Marine Park," she said.

"It also gave people a framework for dealing with issues of non-compliance and it provided some guidelines on how to be a better witness."

The training workshop has been held in four coastal centres along the east coast over the past year.

It was run by the Great Barrier Reef Marine Park Authority with funding from the Australian Government's *Caring for our Country*.

Sea Country Grants awarded

Sea country planning, seagrass monitoring, and teaching young people marine science skills are among the projects Great Barrier Reef Traditional Owners will undertake thanks to grants from the Australian Government.

A number of Traditional Owner groups will receive Sea Country Partnerships Grants provided by the Australian Government's *Caring for our Country* Reef Rescue Land and Sea Country Indigenous Partnerships Program.

The Traditional Owner groups will receive grants of between \$30,000 and \$50,000 to implement projects that are aimed at creating a sustainable future for the Reef.

The grants were open to Traditional Owner groups across all geographical areas of the Great Barrier Reef catchment.

Applications had to be related to sea country management within the Great Barrier Reef and align with one or more of the Land and Sea Country Indigenous Partnerships Program priority areas.

The successful grant recipients have a strong focus on effective sea country management including species conservation, compliance, and developing management plans.



Young Indigenous leaders from Glenmore High School learn about zoning in the Keppel Bay Islands

Traditional Owners will also be involved in recording traditional ecological knowledge, research and monitoring and educating junior reef ambassadors to protect the marine environment.

There is also a project to rehabilitate wetlands through training and work experience that will increase the technical skills of the Traditional Owner groups. The Sea Country Partnerships Grants program was first launched in December 2010 with the aim of supporting Traditional Owners interested in undertaking sea country management initiatives.

Traditional Owners have a close connection to the Great Barrier Reef and are important partners in its management. These projects will assist them

in continuing their vital role in Reef protection.

All successful applicants will now have 12 months to implement their projects with a completion date of 30 June 2013.



The Bindal, Juru and Ngaro Traditional Owner Groups received a \$55,000 grant for rehabilitation and management of coastal wetlands in the Juru sea country.

Through training and work experience, the technical skills of the Gudjuda Reference groups 'NRM' team will be increased to preserve the cultural and spiritual values of coastal wetlands. Members of the group will be trained in aquatic and terrestrial weed control and be provided practical on-ground work experience to implement their skills.

The Gimuy Yidinji Traditional Owner Group received a \$55,000 grant to continue the Munyami Bana Yabanday Monitoring Planning project.

This project will focus on the Gimuy Yidinji people taking a more involved approach to monitoring their sea country by participating in monitoring programs such Seagrass Watch and strengthening partnerships with research institutions such as James Cook University by being involved with existing and upcoming research.

The Eastern Kuku Yalanji Traditional Owner Group received a \$55,000 grant for the Eastern Kuku Yalanji Development Project 2012.

This project aims to investigate and document Eastern Kuku Yalanji Traditional Owner sea country planning and management aspirations which will be used to determine the most suitable sea country management option to implement.

The Girringun Traditional Owner Groups received a \$51,205 grant for a Sea Country Knowledge Forum.

The forum will be an opportunity for Sea Country Rangers and Elders to absorb and respond to information about marine science, State and Federal legislation that impact sea country, species and ecological management options and government support programs.

The Jajikal Warra Traditional Owner Group received a \$54,659 grant for a Junior Reef Ambassadors program.

For this project, a team of young Jajikal Warra people will become Junior Reef Ambassadors – young sea country people with skills in reef science, sea country culture and communications.

The mission of the Junior Reef Ambassadors is to inspire other young people in the Cape York region to learn about, and become engaged in the life and health of the Reef.

The Lama Lama Traditional Owner Group received a \$37,752 grant for sea country and ranger support.

This project focuses on the continued development of the Lama Lama Sea Country Management Program. This will enable greater sea country management in the Princess Charlotte Bay which hosts significant turtle and dugong populations and seagrass beds.

The Koinjmal and Yuibera Traditional Owner Groups received a \$45,290 grant for addressing Central Queensland coastal sea country aspirations.

This project will focus on the development of a Sea Country

Management Plan and will assist people to come together to discuss sea country management issues such as: turtle and dugong management and compliance issues, biodiversity and cultural mapping of country, stakeholder co-operation, Traditional Owner involvement in land and sea management and preservation of Traditional Ecological Knowledge (TEK).

The Yuku-Baja-Muliku Traditional Owner Group received a \$54,171.52 grant for Yuku-Baja-Muliku marine training, turtle tagging and support.

This project will assist Yuku-Baja-Muliku Traditional Owners while they provide the longterm management of their Traditional sea country. The sea country rangers will take on an increased sea country management role with compliance awareness training and a turtle tagging project opportunities for further development.

The Yuibera Traditional Owner Group received a \$55,000 grant for the Yuibera Sea Country Educational Program. This program will raise community awareness of issues affecting the Great Barrier Reef, turtles and dugongs and advise of ways to help reduce the effects on sea country by adopting safe practices and policies for industry and community use.

The Wulgurukaba Traditional Owner Group received a \$55,000 grant for the Wulgurukaba Sea Country Management Plan.

This project provides an approach to assisting the Wulgurukaba Traditional Owners to take a leading role in the management of their sea country and its biodiversity by developing a Sea Country Management Plan.

The Kuuku Ya`u (Kanthanampu and Kungkay) Traditional Owner Group received a \$45,454.54 grant for Kuuku Ya`u sea country management.

This project aims to engage and build capacity of the Kanthanampu Traditional Owners utilising existing Kungkay sea country management frameworks and associated hunting authorisation system. It also aims to provide an avenue for training and educating selected hunters in other

ecological monitoring techniques and boat licensing.

Artwork by Patricia Galvin and Shenoa Sultana

More trained eyes on the Reef

In-water training days in the Cairns and Whitsunday regions have equipped 42 marine tourism crew members to keep an eye on the health of the Great Barrier Reef.

The Great Barrier Reef Marine Park Authority (GBRMPA) conducted the annual training as part of its long-running Eye on the Reef program.

Twenty-one people attended the recent training in the Whitsundays and Cairns.

Participants were taught to look for impacts such as coral bleaching, disease, damage and predation, as well as for the presence of protected and iconic marine animals.

GBRMPA Tourism and Recreation Director Chris Briggs said the trained staff would send in weekly reports on reef health from sites they visited regularly. "The Eye on the Reef program is important to Marine Park managers because it helps create a picture of overall Reef health," Chris said.

"We have 35 tourism operators who monitor sites from the Ribbon Reefs in the northern Great Barrier Reef to Lady Elliot Island in the south on a weekly basis.

"The data they collect provides managers and scientists with a valuable longterm picture of what is occurring on the Reef."

Chris said marine tourism operators were uniquely placed to provide data on trends in Reef health because they visited sites on a daily or weekly basis.

"We absolutely value their involvement in this program because they know their sites intimately and they are in the best position to provide information about those sites."



Emma Scott spots a crown-of-thorns starfish during Eye on the Reef training out from Cairns

Creature feature

Grey mackerel

Picturesque bays like HalifaxGrey mackerel feedBay near Ingham (pictured)exclusively on a dieare likely locations to findlike sardines, anchosmall populations of greyherring in the watersmackerel.northern Australia on

Also known as the broadbarred mackerel, grey mackerel are sought after by recreational and commercial fishers.

Grey mackerel are quite prolific breeders spawning large numbers of eggs during the breeding season between October and February.

Unfortunately it is during this spawning period that they are more easily targeted by fishers as they tend to school together. Grey mackerel feed exclusively on a diet of baitfish like sardines, anchovies and herring in the waters around northern Australia on both the west and east coast. These fast growing fish can reach a maximum size of 10 kg. Bays and inlets where small

Bays and inlets where small populations of grey mackerel

can be found are vulnerable to some of the pressures affecting the Great Barrier Reef such as coastal development, declining water quality and possible effects of climate change.

Inshore estuarine areas which act as nurseries for larval and

juvenile grey mackerel are also susceptible to these pressures.

Through working with local fishers on a regional scale, the GBRMPA is using local and regional knowledge to put in place more sustainable fishing practices.



Halifax Bay. Photo courtesy Alex Autin