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Australian Government Great Barrier Reef Marine Park Authority

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www.gbrmpa.gov.au

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Investigation into illegal fishing



Prices for live coral trout could be the incentive behind illegal fishing

Three commercial fishing vessels have been seized in Gladstone and one in Mackay as part of an ongoing investigation into illegal fishing off the coast of Queensland. Great Barrier Reef Marine Park Authority (GBRMPA) Executive Director John Tanzer said marine management agencies had received tip-offs about illegal fishing from other commercial fishermen.

"The boats have been seized as part of ongoing investigations into commercial fishermen illegally fishing in protected areas off Queensland. Members of the commercial line fishing industry have contacted the Great Barrier Reef Marine Park Authority to report a number of fishermen illegally fishing, particularly off Mackay and Gladstone.

"Some of the illegal activity is believed to be triggered by the prices paid for the sale of live coral trout to Asian markets. The reports we are receiving show some fishermen are purposefully targeting Green Zones, where research suggests coral trout are now about 50 per cent more abundant. If the zoning of the Great Barrier Reef Marine Park is to provide its potential benefits to tourism and fishing then it is absolutely critical there is good compliance."

John commended fishermen who are keen to stamp out illegal practices in their industry. "Illegal fishing in protected areas of the Great Barrier Reef is very serious and will have a detrimental effect on the Reef. Commercial and recreational fishermen who are keen to stamp out illegal fishing in the industry are playing a key role in helping us detect and investigate this threat."

There have been 22 possible offences recently detected that are subject to investigation. Three commercial fishermen are awaiting court appearances on other poaching-related offences. Ten commercial fishermen have been recently convicted of illegal fishing in Green Zones.

John said the Marine Park belonged to the community and everyone had a role to play in ensuring its protection for future generations.



This year the Authority's work was once again recognised through a range of awards. These included the Excellence in Marine and Coastal Management Award from the United Nations Association of Australia (World Environment Day Awards) and the World Travel and Tourism Council's Tourism for Tomorrow Destination Award.

Thanks to all staff for their efforts through out the year. The recognition achieved through these awards is a credit not only to the team at the Authority but also to the strong relationships developed with our Queensland government partners, community groups and peak industry bodies. Maintaining these relationships is critically important in encouraging conservation and sustainable use of the Great Barrier Reef. The Australian Government review of the *Great Barrier Reef Marine Park Act 1975* resulted in amendments to the Act being passed in June of this year. As a result, the Authority remains a statutory authority but will now operate under the *Financial Management and Accountability Act 1997*. Another significant change to the legislation is the requirement for the Authority to prepare an Outlook Report assessing the state of the Marine Park and the issues affecting its sustainable use.

The Honourable Virginia Chadwick AO completed her term this year after eight years in service that saw a number of major achievements including the implementation of a new Zoning Plan for the entire Reef and the agreement between Queensland and the Australian Governments to halt and reverse the decline of water quality in the GBR lagoon within 10 years. Virginia leaves a lasting legacy of improved Reef management that will be important and highly valued by both present and future generations of Australians.

I would like to thank everyone for their support and hard work this year and wish all a safe and happy Christmas and New Year.

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Russell Reichelt Chairman, Great Barrier Reef Marine Park Authority

Keep an eye out this summer

Users of the Great Barrier Reef are being urged to keep an eye out for signs of coral bleaching this summer.

GBRMPA Director of Climate Change Dr Paul Marshall said regular users of the Reef would become part of the Authority's community-based BleachWatch initiative.

"BleachWatch participants are often the first to notice signs of coral bleaching and by informing us they play a valuable role in helping protect the Great Barrier Reef," he said.

"Whether you are a tourism operator, researcher, student, fisher or casual user of the Marine Park you can help us by reporting on the state of reefs you visit over the summer period."

Paul said reports could be made online by going to www.gbrmpa.gov.au and clicking on the BleachWatch icon.

"We are also keen to receive reports on reefs that aren't showing any signs of bleaching as all information helps us determine the state of the reef and the likelihood of a bleaching event."

BleachWatch training workshops will be held along the coast during December.

BleachWatch is a communitybased coral reef monitoring initiative that supports GBRMPA's Coral Bleaching Response Plan. For details on how to become a BleachWatch participant or about the training workshops email bleachwatch@gbrmpa.gov.au or contact the coordinator on (07) 4750 0700.

More information about coral bleaching is available at www.gbrmpa.gov.au.



Coral Bleaching

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Councils make commitment to the reef

Four local councils this month celebrated their commitment to the Great Barrier Reef Marine Park and the environment by joining the Authority's Reef Guardian Councils programme.

The Reef Guardian Council's programme is an innovative environmental programme that encourages councils to get involved in environmental projects.

GBRMPA Executive Director Andrew Skeat said the programme was a fantastic opportunity to showcase the good environmental work councils were already doing and work with them to expand their projects.

"Reef Guardian Councils recognises existing positive actions taken by these local councils to manage coastal resources and raise awareness in the community of issues affecting the environment and the Marine Park," he said.

"We look forward to working with them to help ensure the Marine Park is protected for future generations.

"This includes working together to address pressures like climate change and declining water quality entering the Reef from local catchment areas that connect the land to the ocean."

So far four local government bodies have chosen to be involved in the programme including the Townsville, Burdekin, Hinchinbrook and Livingstone local councils.

Townsville City Council Mayor, Tony Mooney said joining the programme reflected the Council's strong commitment to protecting the environment and promoting sustainability.

"Townsville City Council takes its environmental responsibilities very seriously and are pleased to be among the first councils to join Reef Guardian Councils," he said.

"We have been working on a number of initiatives to raise awareness and implement on-ground measures for healthy waterways, land revegetation and a sustainable Townsville.

"We are extremely proud of our partnership with the Great Barrier Reef Marine Park Authority and the commitment we have made to keeping our coast beautiful and protecting the Reef."



Hinchinbrook Shire Council Mayor Pino Giandomenico with GBRMPA Director Hugh Yorkston



Livingstone Shire Council Mayor Bill Ludwig with GBRMPA Director Hugh Yorkston



GBRMPA Executive Director Andrew Skeat, Federal Member for Herbert Peter Lindsay MP and Townsville City Council Mayor Tony Mooney



Burdekin Shire Council Mayor Lyn McLaughlin with GBRMPA Director Hugh Yorkston

Dugongs call for help

Urgent community action and support is needed to help protect the Great Barrier Reef's dugongs, which are at high risk of disappearing from the region south of Cooktown.

The call from the Great Barrier Reef Marine Park Authority (GBRMPA) follows a number of dugong deaths along the coast between Townsville and Yeppoon since the beginning of September.

Dugong populations along the urban coast of Queensland have declined by more than 95 per cent in the last 45 years.

Great Barrier Reef Marine Park Authority Excutive Director John Tanzer urged the community to get behind measures to protect dugongs in the area.

"Dugongs are in trouble throughout the southern area of the Great Barrier Reef Marine Park and we all have to protect these remaining animals or they will become extinct in the region," he said.

John said there had been 15 reported dugong deaths in the Marine Park since January this year, however it would be naive to

Dugongs are in trouble throughout the southern area of the Marine Park

assume all dugong deaths had been reported.

"We support the Queensland Government in their attempts to address impacts on dugong through a review of the East Coast Inshore Finfish Fishery, in particular the large mesh net component of the fishery," he said.

"The community can also help by slowing their boats in important dugong habitat such as seagrass areas reporting any strandings and deaths to the EPA Hotline on 1300 130 372.

"While many fishermen use their nets responsibly, we encourage fishermen to supervise their nets to avoid accidental entanglement."

Dugongs on the Great Barrier Reef continue to be affected by a range of human-related activities including boat strikes, declining water quality and entanglement in fishing nets. A new technical guide aims to assist Marine Park managers with identifying the causes of dugong mortality on the Great Barrier Reef.

The second edition of Procedures for the Salvage and Necropsy of the Dugong (Dugong dugon) gives scientists comprehensive information on how to conduct post mortems of dugongs.

This information is used by Marine Park managers to identify mortality patterns and causes of death, which can be addressed through conservation management strategies.

The publication is now available online at www.gbrmpa.gov.au/corp_site/ info_services/publications/ research_publications

Help the reef by starting at home

Switch off the box

A large screen TV, used six hours a day, can generate around half a tonne of greenhouse gas each yearmore than a family fridge. So enjoy your big screen TV, just turn it off if you aren't watching it.

The most efficient conventional TVs (around 76 centimetres) generate a third as much greenhouse gas as big screen plasma and LCD TVs: check the specification plate for the lowest watts.

Source: The Department of Environment and Water Resources and Australian Greenhouse Office – visit www.cc.greenhouse.gov.au.

Butt busters hit the streets

A war was waged on litter when a dedicated group of staff from the Great Barrier Reef Marine Park Authority (GBRMPA) hit the streets for a clean up of cigarette butts.

Armed with surgical gloves and clip-seal bags staff used their own time for the clean up, the brainchild of several staff members keen to prevent litter from ending up in the Marine Park.

Clean up organisers Sally Harman and Jessica Hoey said the clean up helped prevent litter like cigarette butts washing from gutters and drains into the Great Barrier Reef.

"Through our work at the Great Barrier Reef Marine Park Authority we're passionate about the marine environment and aware of the damage litter can have on plants and animals," Sally said.

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"This was a fantastic opportunity to put our passion into action and make a difference to the environment that's literally on our doorstep.

"The clean-up was particularly timely as it coincided with Threatened Species Week."

Litter can wash from gutters and drains into waterways that connect the land to the Great Barrier Reef.

Cigarette butts can be confused with food and swallowed by marine wildlife, causing internal blockages that often result in starvation and other complications.

Staff plan to continue doing clean ups in the coming months.

John Tanzer speaks to Al Gore about the Great Barrier Reef

Great Barrier Reef Marine Park Authority Eccutive Director John Tanzer has recently attended a forum in Melbourne called "Our Planet – Leaving a Legacy" which featured environmentalist Al Gore as its keynote speaker.

The forum brought together 1100 delegates from business, industry and government to examine sustainability in the areas of biodiversity, transportation, renewable energy resources, water and urban development.

GBRMPA Excutive Director John Tanzer, who addressed the forum about sustainability and the Great Barrier Reef Marine Park Authority, said this was a good opportunity to talk to opinion leaders and about the pressures affecting the reef.

"At the forum the Authority was recognised for implementing best practice strategies for managing the sustainability of marine park eco-systems.

"It was also a great opportunity to speak to business, industry and

government leaders about the pressures affecting the Great Barrier Reef and its future."

Other key speakers were 2007 Australian of the Year, Professor Tim Flannery; Labour's Shadow Minister for the Environment, Peter Garrett; Adam Kirkman, Program Manager for Energy and Climate Change, World Business Council for Sustainable Development in Switzerland.



Famous environmentalist Al Gore and GBRMPA Excutive Director John Tanzer

Sad mystery at Reef HQ

Minty, Reef HQ Aquarium's much loved green sea turtle, recently passed away from a mystery illness.

Shelley Anthony Reef HQ Marine Biologist, coordinator of the turtle rehabilitation centre and overall carer of living exhibits at the aquarium said that the exact cause of death at this stage was still unknown, although tests have confirmed it was of natural causes.

Minty, a leucistic green sea turtle, was a genetic rarity and other turtles with this condition are seldom found alive in the wild.

"The turtle's bright white colouration whilst a wonderful attraction in our aquarium would have made it a prime target for predators in the natural marine food chain.

"Also as with most leucistic turtles Minty suffered a number of genetic irregularities and a number of related health conditions had been successfully treated during its stay at Reef HQ," Shelley said.

While only with the aquarium for 18 months Minty provided an

outstanding opportunity to raise awareness of the plight of the green sea turtle.

Both national and international visitors to the aquarium were attracted by Minty's uniqueness, which contributed to increased awareness and education about the vulnerability of the green sea turtle species and the need for their protection.

The staff at Reef HQ and the Great Barrier Reef Marine Park Authority are deeply saddened by the loss of our much loved turtle who has touched the hearts and minds of not only our staff but the people of the Thuringowa and Townsville community.



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Don't be the catch of the day

If you're going boating or fishing in the Great Barrier Reef Marine Park this festive season, remember to brush up on zoning so you don't become the catch of the day.

Zoning defines what activities can take place in which locations to ensure activities are ecologically sustainable and plants and animals are protected.

Penalties apply for not following zoning rules so it is important people know where they can go and what they can do so they have a great day out on the water.

Great Barrier Reef Marine Park Authority (GBRMPA) Operations Director Mick Bishop said free zoning maps were widely available to assist with navigating zoning.

"We encourage people to brush up on zoning before heading out on the water and take their free zoning map with them," he said.

"Boaties should be particularly mindful of Green Zones that prohibit fishing and Yellow Zones where there are limitations on fishing activities."

Marine Park enforcement officers can issue on-the-spot fines of \$1100 to recreational fishermen found illegally fishing in Green Zones, following changes to the Great Barrier Reef Marine Park Regulations.

Preliminary research by James Cook University and the Australian Institute of Marine Science in early 2006 demonstrates the positive effects of Green Zones were already emerging.

The research found both coral trout and stripey sea perch increased as much as two times in the newly protected no-take Green Zones.

Free zoning guides and maps are widely available from bait and tackle shops, visitor information centres, ship chandlers and Queensland Parks and Wildlife Service and Queensland Boating and Fisheries Patrol offices. Alternatively boaties can contact the GBRMPA on 1800 990 177 for a free map.

Land and Sea Conference heralded a success

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Working together to manage sea country in the Great Barrier Reef was discussed at the second National Indigenous Land and Sea Management Conference in Cardwell, north Queensland.

Great Barrier Reef Marine Park Authority (GBRMPA) staff were at the event to showcase and discuss how the Authority works with Traditional Owners in a shared approach to sea country management.

GBRMPA Excutive Director John Tanzer said the Authority was pleased to support the event and saw it as an excellent opportunity to establish relationships with Traditional Owners to manage sea country.

The three-day event and weekend cultural festival saw a great number of attendees, among them Traditional Owners from across Australia and a range of government agencies.



Christine Doherty Woppaburra Traditional Owner, Phil Rist Girringun CEO and John Tanzer GBRMPA Executive Director



Part of the festivities at the Land and Sea Conference



There was much to see and do

Sea Country Snippets

Fish Traps

- Aboriginal and Torres Strait Islander built fish traps are stone structures found in intertidal areas along the Australian coast line and its islands
- Fish traps attract all kind of fish species over the walls on the incoming tides. Most traps have a stone gate which can be closed to trap the fish during the receding tides ready for people to collect
- Fish traps are usually very old and are an important part of Australia's cultural heritage. These important cultural heritage sites are protected by Commonwealth and State legislation along the Great Barrier Reef.

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This fish trap at Hinchinbrook Island (country of Bandjin Traditional Owners) is protected by 'no anchoring buoys' in the channel to protect it from visitor damage (buoy shown in photo background).

Environmental road show visits Townsville

World leading environmentalists met in Townsville recently to discuss key environmental issues for the region and to share best practice messages with the local community.

The meeting was part of an environmental roadshow, entitled EP3 – the Third Wave of Environmental Practice, which included a series of one-day forums held across Australia and New Zealand.

Dr Adam Smith, Acting Director of Program Delivery at the Great Barrier Reef Marine Park Authority (GBRMPA) helped to coordinate the Townsville conference, which he said addressed issues such as water, energy, climate change and sustainability.

"It was inspirational for our local environmental practitioners to share in their enthusiasm for the environment with world leaders like Clean Up Australia's Ian Kiernan, RAMSAR's Deputy Secretary General Dr Nick Davidson and James Cook University's Pro Vice Chancellor Professor Chris Cocklin.

"EP3 was a great opportunity to listen and learn about what has been done both locally and elsewhere to address environmental issues.

"The meeting brought together some of Townsville's most visionary environmentalists and presented a unique opportunity to change behaviours and really make a difference."

The EP3 forum was an initiative of the Environment Institute of Australia and New Zealand (EIANZ), the peak professional body for environmental practitioners in Australasia.

The GBRMPA was a key sponsor of the event and was the first organisation in Australia and New Zealand to be accredited as a certified EIANZ environment practitioner. The Authority won a prestigious United Nations award in 2007 for excellence in marine and coastal management.

Eye on the Reef - partnerships pay off for research purposes

Learning about coral disease was the highlight of three successful workshops held lrecently in Cairns, Port Douglas and the Whitsundays.

The workshops, which form part of a regular series of workshops organised by the Eye on the Reef Programme, featured guest researchers Professor Bette Willis and Roger Beeden from the School of Marine and Tropical Biology from James Cook University.

At the workshops, Bette and Roger provided an overview of coral disease on the Great Barrier Reef, and showed tourism staff how to identify coral diseases.

Bette said that very little was known about coral disease on the Great Barrier Reef and it was great to discover tourism staff were happy to assist in identifying new locations where coral disease is occurring and are able to help researchers track diseases over time.

"It is wonderful that tourism operators are keen to be involved in learning how to identify coral diseases and are happy to report back on this information," she said.

"The Great Barrier Reef Marine Park is an extensive area and the assistance of tourism operators will prove invaluable in identifying areas where coral diseases occur."

Tourism operators are out on the reef regularly, are very familiar with their sites and can identify changes in the reef with ease.

"Tourism operators are one of the best allies for monitoring the health of the Great Barrier Reef Marine Park as they are in an ideal situation to collect long term data which could greatly assist with our research," said Bette.

The workshops demonstrated the strong partnerships created through the Eye on the Reef Programme and each workshop provided a unique opportunity for the tourism operators, researchers and staff from the Great Barrier Reef Marine Park Authority to learn from each other.

Low Isles – a step closer to being climate neutral

An innovative environmental project has brought Low Isles a step closer to being the first climate neutral Commonwealth Island in the Great Barrier Reef Marine Park.

Biodiesel and solar panels have been used on the coral cay off Port Douglas, which is among 70 islands owned and managed by the Australian Government in the Marine Park.

Great Barrier Reef Marine Park Authority Commonwealth Islands Manager Kathleen Swalling said the alternative energy systems were proving successful.

"We've aimed to develop a sustainable method for minimising diesel emissions while still meeting current and future energy requirements," she said.

The switch from diesel fuel to biodiesel in existing generators achieved fuel savings of 40 per cent and at least 80 per cent emission reductions.

Re-activation of an existing 4kw solar array reduced biodiesel fuel consumption by 80 per cent with a corresponding decrease in noise emissions.

Kathleen said the project also focused on local and regional capacity to deliver such projects in similar environments.

"We encourage people to consider adopting similar environmental practices at home, work and in schools – it's good for the environment as well as quite economical."

The project will form the basis for future action addressing more complex situations on other Commonwealth Islands in the Great Barrier Reef Marine Park.





Kids working to clean up our act

Reef Guardian students from Belgian Gardens State School talked trash with Clean Up Australia CEO and former Australian of the Year, Ian Kiernan, at a recent environmental conference in Townsville.

The Rowes Bay Junior Rangers, as they call themselves, presented lan with demonstrations of various rubbish collection devices they invented as part of a school unit on technology.

Ian was impressed by the creativity and ingenuity that had gone into the rubbish collectors.

"These students are a credit to their community and to their nation," said Ian.

"The Reef Guardian Schools programme is a wonderful initiative and it is delightful to see these young people getting out

Cross-continental conversations bring together Indigenous youth

State-of-the-art technology linked Indigenous students from St. Patrick's College, a Reef Guardian School in Townsville, with students from five Native American tribes via reef video conferencing.

The students had a virtual meeting to discuss marine issues as part of an education initiative of the Great Barrier Reef Marine Park Authority (GBRMPA).

GBRMPA Reef Guardian Schools Programme Manager Megan Sperring said the meeting was an excellent opportunity for the groups to discuss their relationships with the marine environment.

"The meeting brought together students from very different backgrounds who shared similar experiences," she said.

"It was wonderful to see our reef video conferencing programme there and changing perceptions in their community."

The students were also thrilled to share their passion for the environment with a man who knew exactly what they were on about.

"It was great to meet Ian," said Year Six student Denver Hill.

"He was really supportive of our environmental work and that meant a lot to us coming from someone with his track record."

The students presented Ian with a Reef Guardian Schools calico bag and encouraged him to use it.

Belgian Gardens State School has been part of the Reef Guardian Schools programme since its inception in 2003. The school has been recognised by all levels of government for its ongoing commitment to environmental sustainability.

connecting students from around the world.

"Both groups were proud to discuss their significant cultural and spiritual relationship with the sea."

For an hour the students shared songs, stories, poems and beliefs about the sea. The talks covered traditional management of marine resources and social values. In the last twelve months reef video conferencing has been used to reach over 4000 students from all over Australia and around the world including countries such as England, France, Greece, South America, Alaska, South Africa, New Zealand and the USA just to name a few.

Belgian Gardens State School Students with

Clean Up Australia CEO Ian Kiernan



The reef video conference connected students from around the world

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Artist dives into Reef HQ

As a special treat for visitors during the school holidays, Reef HQ hosted renowned local underwater photographer, Dr David Wachenfeld as an 'artist in residence.'

During his residency at Reef HQ Aquarium David entertained visitors by diving in the Aquarium's Coral Reef Exhibit and other tanks to capture images of Reef HQ rarely seen by visitors.

David began diving at a young age and developed a passion for marine life and capturing the beauty of the ocean in photographs.

He said diving at Reef HQ was a unique opportunity for both himself and visitors to discover a side of the Aquarium previously unseen. "There are many amazing creatures that inhabit the tanks, but are out of public view and hidden behind rocks and corals. Capturing these on camera and sharing them with both staff and visitors to Reef HQ was a great thrill" he said.

In addition to conducting underwater photography, David also presented a range of special talks and presentations, including a daily underwater dive show.

David has dived on coral reefs from French Polynesia to the east coast of Africa conducting research, taking photographs, teaching people and working to protect the environment.

On top of David's photographic pursuits, he is also the Director of the Science, Technology and Information Group at the Great Barrier Reef Marine Park Authority.



Dr David Wachenfeld, artist in residence

Local team removes bags, bottles, balloons and other unexpected items in Curtis Island cleanup

Bottles, balloons, plastic bags and even an old fridge were among the rubbish collected when Gladstone LMAC member Teresa Wilkie and five others from the Tanum-Boyne Coast Care Group undertook a clean up during a weekend trip to Curtis Island.

Organised in conjunction with Queensland Parks and Wildlife Services (QPWS), the Fitzroy Basin Association and the Coast Care Group, the team filled seven, onetonne bags with rubbish they collected from five of the beaches on the Island.

Teresa said this was the second time she has done this kind of activity and encouraged others to do it.

"Seven, one-tonne bags were filled over one weekend by six people. Imagine the results that could be achieved if other groups regularly took up this kind of activity," she said.

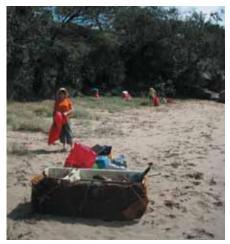
"The majority of rubbish we picked up on the island was plastic products, glass bottles, balloons and in one case the shell of an old fridge, the clean up certainly made a big difference to the beaches.

"It's obvious that people aren't being mindful of how they dispose of rubbish and how their actions could affect the habitat and the animals that live there," said Teresa. The clean up was made possible with help from the QPWS, which waived camping fees for the weekend and supplied pick up vehicles for the rubbish.

The Fitzroy Basin Association also aided by paying for vehicles and camping equipment to be taken to the island via a barge.



The Curtis Island clean up team with the rubbish they found



All kinds of rubbish is left on the beaches

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Climate change and the Great Barrier Reef

More than 80 leading climate and tropical marine experts from around the world have contributed to the first comprehensive assessment of the Great Barrier Reef's vulnerability to climate change.

The publication entitled *Climate Change and the Great Barrier Reef: A Vulnerability Assessment* provides a synthesis of the implications of climate change for species, habitats and ecosystem processes on the Great Barrier Reef.

Great Barrier Reef Marine Park Authority Director of Climate Change Dr Paul Marshall said the assessment was an important tool for understanding how climate change impacts on the Great Barrier Reef.

"Climate change is recognised as the greatest long-term threat to the Great Barrier Reef," Paul said.

"This ground breaking vulnerability assessment provides us with important information on which to base management decisions."

Climate Change and the Great Barrier: A Vulnerability Assessment and the Great Barrier Reef Climate Change Action Plan 2007 – 2012 are available online at www.gbrmpa.gov.au.

Gladstone community helps fight climate change

The Gladstone Local Marine Advisory Committee recently held a climate change forum targeted at local community members interested in making the Great Barrier Reef Marine Park more resilient to climate change.

GBRMPA Southern Regional Liaison Manager Jeanette Kirby said the Marine Forum presented a great opportunity for local community members who wanted to learn more about the impacts of climate change on the Reef and how they could do their bit to help prevent further damage.

"The forum provided locals with a unique chance to hear from speakers from the Great Barrier Reef Marine Park Authority, the Australian Institute of Marine Science and from the Eco Friendly Fishing Association," she said.

Gary Fooks from the Eco Friendly Fishing Association spoke about how locals could be more environmentally aware and responsible in their fishing practices.

"Some of the smallest actions can make a huge difference. It can be as simple as using biodegradable lures, or keeping your engine tuned." he said

"However, the biggest difference comes from making a change to the type of outboard motor you use when you head out onto the water. A traditional two-stroke engine can let out twenty times more the emissions than a four-stroke or high-tech two-stroke engine.

"Local anglers need to understand the impact they have on their own local marine ecosystem and adopt responsible practices so that they can continue to enjoy it for years to come." Gary said

Interesting Facts

Bonnet head shark shows virgin birth in Nebraska aquarium The female gave birth to a pup, no males were in the tank and she'd been captive for several years. DNA analysis has shown that the pup had no paternal DNA, ie: it was a clone of the mother. This process is called parthenogenesis. It's rare and has never been recorded in sharks and rays before.

Published in Biology Letters, 2007 Vol. 3(4): 425-427



Photo courtesy of Todd Stailey/Tennessee Aquarium

GREAT BARRIER REEF

Shifting the baselines of our knowledge

Gathering information to help us prepare the Great Barrier Reef Outlook Report is well underway.

Providing an outlook for the future of the Great Barrier Reef requires more than a little digging into the past.

By having a better understanding of what this amazing area used to be like, we will be better able to chart its outlook.

Over the coming months, the Great Barrier Reef Marine Park Authority (GBRMPA) will be looking to local communities and scientists to help create a picture of the past, present and future of the Great Barrier Reef.

Shifting Baselines

It's only natural that people who visit the Great Barrier Reef now compare it with their own previous experiences. Each of us has a 'baseline' of what we think the Reef was naturally like and therefore how much it has changed.

But our 'baseline' was not that of Captain James Cook or previous Indigenous generations. The changes that have taken place on the Reef in the last 200 years have been profound – but they have been gradual and many we have hardly noticed.

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Using current observations, we may think that dugongs are a rare species because they are not seen frequently. Old journals and shark control records, however, show a different story. In the 1960s there was probably 95 per cent more dugongs as now along the urban coast of Queensland. In earlier times, dugongs were so numerous that there are documented reports of the beaches stinking of their faeces! Our 'baseline' for the number of dugongs has definitely shifted over the generations.

An understanding of these shifting baselines, of the changes that most of us have not actually seen, is important when assessing the state of our environment and the trends it is following.

The GBRMPA Outlook Report will be using a combination of historical records, scientific knowledge and community input to make sure that the outlook for the Reef is developed using a strong understanding of the way things were and how they have changed.

Marine Park Partnerships

Profile of Regional Liaison Manager (Southern) – Community Partnerships Group

Jeanette Kirby

Jeanette Kirby is looking forward to reacquainting herself with the Queensland coast after spending the last twenty years working and living in the Northern Territory and Western Australia.

Jeanette has worked in some of Australia's most beautiful locations including Kakadu National Park, Cape Range National Park and Ningaloo Marine Park. She now adds the Great Barrier Reef to that list as she takes up the position of Regional Liaison Manager for the southern region.

"I have come over from the west having spent two years working in Exmouth where I was the Parks and Visitor Services Coordinator looking after Cape Range National Park, Ningaloo Marine Park and Coral Bay precinct. Before that I worked at Kakadu National Park for 18 years in a variety of positions that were both office and field based," Jeanette said.

"In my previous positions I have spent a lot of time with Indigenous groups. I have a real passion for both mentoring and training Indigenous people as well as Indigenous tourism projects. Hopefully I will be able to bring some of that experience to my role here.

"I'm also looking forward to fostering a bottom up approach towards community involvement with governments and have been getting out into the community and talking with everyone who has a stake in the Marine Park."

Jeanette said now that she lived in a real town she loved the food shops and markets and being able to buy fresh local produce and the variety that's available.

Originally from Queensland, being born and raised in Mackay, Jeanette moved away soon after completing high school.

"Rockhampton is a far cry from the remote areas of Western Australia and the Northern Territory, and I am really enjoying being closer to family and friends.

"I can't wait to get out into the Marine Park and indulge is some fishing, diving and boating."

Creature Feature

Coral Trout

- Five species occur on the Great Barrier Reef
- *Plectropomus leopardus* is the most common species found mostly on offshore coral reefs
- Change sex from female to male
- All are spotted and change colour under varying environmental and physiological conditions
- They aggregate to spawn between September and December during new moons, releasing egg and sperm into the ocean
- Coral trout reaches its maximum size of 70 cm at 15 years and can reproduce at two to three years
- They are ambush predators
- There is potential to hybridise among species
- Juveniles of at least three species are thought to mimic poisonous puffer fish



Doing your bit to look after it!

It's Turtle Time

As summer approaches, our beaches may have some special night time visitors.

Great Barrier Reef Marine Park Authority (GBRMPA) Species Conservation Manager Dr Kirstin Dobbs said female marine turtles would be soon returning to the areas of their birth to come ashore and nest.

"Most female turtles come ashore to lay eggs between October and February, laying about 120 eggs in a clutch," she said.

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"The hatchlings then emerge from the nest seven to 12 weeks later, usually between December and May."

Six of the world's seven species of marine turtle live in the waters around Australia, and all six are found within the Great Barrier Reef World Heritage Area.

"All of these species of turtles are protected species. This is one of the reasons why it is essential people take care when watching female turtles lay eggs or the hatchlings emerge from the sand and make their way to the ocean," Kirstin said.

"People can help protect turtles by not throwing any garbage including fishing line or plastic bags on the beach or in the ocean and by reducing their environmental footprint to help address climate change," she said.

For more information about marine turtles in the Great Barrier Reef World Heritage Area see www.gbrmpa.gov.au or www.deh.gov.au/coasts/species/turtles.

Community Links

A profile of **Rhonda Marriage** Commercial Estuaries Fisher RW & RP Marriage

Rhonda Marriage has been a commercial fisher for just over eight years after a literal sea change but since then, she hasn't looked back- becoming a real credit to her industry.

Not only is Rhonda a vibrant supporter of the industry but she, along with her husband Russell, are tireless campaigners who enjoy teaching others in their community about their industry. Both work to change the public perception of commercial fishing by showing others the sustainable ways in which they, along with many others in their industry, fish.

"Both Russell and I are all up for breaking the bad perception that is out there about commercial fishers," she says.

"Commercial fishers are members of the community. Like any industry, the majority of us do the right thing and it's the ones who do the wrong thing that stand out.

"Just like most fishers in our industry, we want to ensure our industry continues to operate in the future. As a result, our fishing practices take into consideration sustainability, the protection of animals and their habitats.

Rhonda and Russell are so passionate about changing the perception of their industry that they assisted with the development of the Mackay Commercial Fishers Code of Conduct, which among other things promotes sustainability in the fishing industry.

Also as part of their public education work Rhonda and her husband Russell are often requested to do school talks with the aim of showing kids how commercial fishermen really do their job.

"We're as green as they come, along with many others in the industry. We see rubbish in the environment we pick it up. We assist marine researchers with their work. We love what we do and we want it to be an industry that continues long into the future," Rhonda said.

When asked what her one wish for the future of the commercial fishing industry was she said that she hoped the industry continues into the future so they could continue providing a good quality healthy food source to all Australians.

Rhonda said she also hoped that the Government recognises the impact recreational fishers are having on the marine environment.

"With all the mod cons that are currently out there for recreational fishers to use, the impact they are having on the marine eco system is now quite extensive. It's not just about going out, enjoying the day and maybe catching a fish. It's now more about how many fish they can catch and this is definitely having an impact on the environment," said Rhonda.

Calendar of event

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	05	- II November 2007	
		National Recycling Week	
	03	- 09 December 2007	
1		Coastcare Week	A DECEMBER OF
	14	November 2007	
8		Mission Beach LMAC me	eting
	20	November 2007	and the second se
	25	Hinchinbrook LMAC mee	ting
	03	- II incl. December 2007	
		QLD Government coral r	eef fin fish closures
	04	December 2007	
		Mackay LMAC meeting	740
	11	December 2007	
2		Port Douglas LMAC mee	ting
	11	December 2007	- B-
	100	Capricorn Coast LMAC n	neeting
	13	December 2007	
		Burnett LMAC meeting	
1	20	December 2007	
	37	Townsville LMAC meeting	
	25	Dec – I January 2008	
		GBRMPA Christmas Clos	ure
		And the second se	Contraction of the second s

GBRMPA contacts

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Australian Government

Great Barrier Reef Marine Park Authority

