

SeaRead

Marine Park news from catchment to coral

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Australian Government

Great Barrier Reef
Marine Park Authority

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www.gbrmpa.gov.au

Reef HQ visitors learn of traditional Sea Country connections

Minister for the Environment, Heritage and the Arts Peter Garrett, recently launched a new Sea Country Connections exhibit at Reef HQ Aquarium in Townsville.

Mr Garrett said the exhibit, which is funded through the Caring for our Country Program, was a great way for the community to explore the unique relationship Indigenous Australians have with the sea.

"This is the first step in a long journey to educating visitors about Aboriginal and Torres Strait Islander peoples' current and historical connections to Sea Country," he said.

"Visitors to the display will gain a greater understanding of the important role that Traditional Owners play in the conservation of the Great Barrier Reef as well as an appreciation for the traditional customs still practiced today.

"For thousands of years, Aboriginal and Torres Strait Islander peoples have used the natural environment and its resources for cultural, spiritual and economic purposes in a sustainable way.

"The Great Barrier Reef formed in the presence of Indigenous peoples - there is evidence of marine resource usage in the Whitsundays dating back 15 000 years.

"Thousands of years before Captain Cook's ship Endeavour struck a reef near Cooktown, Aboriginal and Torres Strait Islander peoples used the reefs, islands and adjacent mainland to fish, hunt and gather.

"Social and cultural practices associated with the Great Barrier Reef demonstrate long-standing, complex and intertwining connections between Indigenous peoples and Sea Country."

The exhibit features interpretative material, an educational presentation, artwork contributed by John Cummins whose art style is the Quinkan art of the GuGu Yalanji and a collection of artefacts contributed by Russell Butler, a Traditional Owner of the Warrgamay / Bandjin people of the Herbert River and Hinchinbrook Island.

A school holiday program dedicated to educating children about Indigenous connections to the Great Barrier Reef will also be developed.

"It's wonderful to see the Caring for our Country - Reef Rescue funding being used to educate the community on the long-standing relationship Indigenous people have with Sea Country," Mr Garrett said.

This project is supported by the Reef Rescue Indigenous Land and Sea Country Partnerships Program and Reef HQ Aquarium the National Education Centre for the Great Barrier Reef, through funding from the Australian Government's Caring for our Country Program.



Cutting of the ribbon at the opening of the Sea Country Connections exhibit at Reef HQ Aquarium

Message from the Chairman



With the start of a new decade, it is timely to reflect on key achievements over the past 10 years for the Great Barrier Reef and also look forward to the new decade for opportunities to promote the protection of this great natural treasure. The major steps forward have been in water quality and conservation, combined with improved communication and outreach to the public.

In 2003, the Commonwealth and Queensland governments agreed on the first Reef Water Quality Protection Plan, which was revised and renewed only last year by the two governments. Great Barrier Reef Marine Park Authority (GBRMPA) staff played an important role in assisting governments reach this agreement. There is now a strong recognition of the need to ensure that the water flowing off the land into the lagoon of the Reef is of the highest quality in order to sustain a healthy ecosystem. There is a strong sense of commitment coming from farmers and local authorities aiming to achieve the goals set in the Reef Plan.

In 2004, the GBRMPA completed the Zoning Plan for the Great Barrier Reef – a task that began some 27 years earlier, but the step taken in 2004 was a quantum leap and increased the area of high protection from 4 per cent to 33 per cent of the total area of the Marine Park. The benefits to the reef ecosystem are already evident with the natural system returning in areas of higher protection. A recent scientific report indicated that there is also a reduction of crown-of-thorns starfish in these highly protected areas. Providing refuges for species on the reefs and giving reefs the opportunity to flourish without disturbance is especially important in the face of threats like climate change.

In 2005, the GBRMPA celebrated 30 years of operations. The continuity of the GBRMPA's regulatory regime and its partnership with Queensland has contributed to its success in creating a stable system of governance in the Marine Park.

The GBRMPA's community partnerships have long been a vital component to managing the Great Barrier Reef. Established since 2000, Reef Advisory Committees focussing on conservation, tourism, fisheries and water quality, provide advice on management of the Marine Park. These committees joined the already established Local Marine Advisory Committees spread along the length of the Great Barrier Reef catchment. In 2005 the GBRMPA's community partnerships expanded with the establishment of Regional Offices in Cairns, Mackay and Rockhampton.

Education is a key part of the Reef's management. The Reef HQ Aquarium in Townsville has been successful in presenting the values of the Great Barrier Reef to the public. Taking the education program more widely, the Reef Guardian Schools and Reef Guardian Council programs are flourishing. Our work with Traditional Owners has also achieved positive outcomes with the establishment of Traditional Use of Marine Resource Agreements to jointly manage Sea Country.

For much of this past decade, partnerships with the tourism industry have been very effective with the GBRMPA working closely with tourism operators to establish the High Standard Tourism Program. The program recognises tourism operators who demonstrate a commitment to sustainable practices in running their operation. There are currently 48 high standard operators who carry over 50 per cent of visitors to the Marine Park.

New collaborations are now emerging – in particular with the commercial fishing sector, and both the GBRMPA and the commercial fishing industry are reaping the rewards of this cooperation. Through our partnership with the Queensland Seafood Industry Association, we are working with the fishing industry to develop strategies that are both good for their business and good for the environment.

The launch of the first Great Barrier Reef Outlook Report in 2009 signalled the start of a regular and reliable means of assessing the state of the Reef and the performance of its management in an accountable and transparent manner.

As we move into the next decade, we will be guided by the Outlook Report on where to direct our energies for both partnerships and management initiatives. The Outlook Report clearly indicates the outlook for the Great Barrier Reef ecosystem is at a crossroad, and decisions made in the next few years are likely to determine its long-term future.

The last 10 years were the warmest on record and the effect of climate change presents a challenge to coral reef ecosystems worldwide. The Great Barrier Reef is not immune to this threat and is already under pressure, although current management arrangements mean the Reef is more resilient than many other coral reefs around the world.

The GBRMPA treats the responsibility for long term protection of the Great Barrier Reef as a shared one. Together, we can all help to look after the Great Barrier Reef. We look forward to working with industry groups, researchers, councils, community, indigenous groups, schools and other stakeholders to achieving this goal.

Russell Reichelt
Chairman
Great Barrier Reef Marine Park
Authority

Reef saving research central to reef protection over the last decade

Scientifically robust research played a vital role in helping protect one of the world's greatest natural treasures, the iconic Great Barrier Reef, in the first decade of the 21st century.

The hottest decade on record where climate change emerged as a major threat to coral reefs worldwide also saw research lead to big wins in protecting and building the resilience of the Great Barrier Reef ecosystem.

Great Barrier Reef Marine Park Authority (GBRMPA) Chief Scientist Dr David Wachenfeld said research was at the heart of successful reef protection measures over the last decade, such as zoning that has resulted in increased fish abundance.

"The key role of research in ensuring the Great Barrier Reef remained one of the healthiest reef ecosystems in the world during the last decade cannot be overstated," he said.

"As a management agency, GBRMPA relies on quality research provided to us by partner organisations such as the Australian Institute of Marine Science, James Cook University, CSIRO and the University of Queensland.

"Over the last ten years, this research formed the basis of successful reef protection measures

that are helping protect the Great Barrier Reef and the communities and industries that depend on it."

Among the big ticket items of the last decade was protecting plants and animals through zoning, a process that used research to both inform its establishment as well as measure its success.

Researchers found spectacular recovery in coral trout numbers on unfished reefs, with coral trout numbers rebounded by 31-75 per cent on a majority of reefs closed to fishing for as little as 1.5 to 2 years.

Other research undertaken in the last decade that helped inform Reef management covered a range of areas, including:

- ocean acidification
- recovery of corals after extreme weather
- impact of increased temperature on species migration
- effects of line fishing
- coral cover, condition and trends
- aerial surveys of dugongs and marine turtles
- crown-of-thorns starfish.

The findings from this research painted a clear picture of the health of the Reef and underpinned the decisions made by the GBRMPA in managing the Reef to protect it for the future.

Extensive research into water quality and ecosystem health also resulted in the Australian Government's Reef Rescue initiative that is looking at land management practices.

David said the next decade would be guided by the Great Barrier Reef Outlook Report, one of the most comprehensive, authoritative and contemporary publications on the current state of and possible future for the Reef.

"The decade culminated with the release in 2009 of the first Great Barrier Reef Outlook Report that drew on extensive scientific knowledge and was peer reviewed by national and international scientific experts," he said.

"The Outlook Report, along with research from our research partners, will help inform management of the Great Barrier Reef into the next decade and beyond.

"The Outlook Report clearly indicates the outlook for the Great Barrier Reef ecosystem is at a crossroad, and decisions made in the next few years are likely to determine its long-term future.

"We are fortunate that the Reef is one of the healthiest in the world, however it is already under pressure and we cannot be complacent about the threat climate change poses as we move into the next decade."

Reef creatures up for adoption

Marine animals at Reef HQ Aquarium are now up for adoption with the start of the aquarium's new Adopt a Reef Creature program.

The new program allows people around Australia and the world to adopt a humphead wrasse, sponsor a shark, or keep tabs on a turtle.

Reef HQ Aquarium Director Fred Nucifora said the program recognised the human threats facing marine animals and gave people an opportunity to give back to these animals.

"The financial contribution people make to the program goes directly back to the animal in the form of life necessities such as food, vet supplies and care," he said.

"People will also get to come into the aquarium to participate in special programs and have a more personal encounter with their animal."

The adoption package includes:

- E-Newsletters to keep people up-to-date with their adopted animal's antics at the aquarium
- Information about the biology of the animal
- Information about the threats facing the species in the wild
- Tips on what people can do to help their adopted animal.

"This program is a great way for people to help care for marine animals while learning lots of interesting things along the way," Fred said.

"A tax deductible Reef HQ Aquarium animal adoption is a good idea for an environmentally-friendly gift."

Adoptive parents are also invited to free public seminars, guided tours of Reef HQ Aquarium's new Turtle Hospital and other exhibits, and opportunities to be part of special community action days to clean up local beaches and waterways and to plant native vegetation.

For more information, or to adopt your own Reef HQ Aquarium creature, please contact Laura Dunstan on (07) 4750 0754 or laura.dunstan@gbbrmpa.gov.au



Friends at Reef HQ Aquarium ready for adoption



Experts and marine managers team up on Sea Country management

A newly established Indigenous Reef Advisory Committee met for two days recently, offering specialist advice to the Great Barrier Reef Marine Park Authority (GBRMPA) on the development and implementation of the organisation's Reef Rescue Indigenous Land and Sea Country Partnerships Program.

GBRMPA General Manager Peter McGinnity said the committee provided valuable advice on activities the Reef Rescue Indigenous Land and Sea Country Partnership Program should support.

"The membership of the Indigenous Reef Advisory Committee is made up of leaders in the field of Indigenous partnerships and Sea Country management.

"The primary aim of the committee is to provide advice to the GBRMPA on the implementation of its program to work with Traditional Owners to protect the Great Barrier Reef.

"The committee provided advice on applying world's best practice principles to Sea Country planning and implementation and advised on ways to facilitate partnerships, build capacity and engage with Traditional Owners in the management of marine resources in the Great Barrier Reef."

Indigenous Reef Advisory Committee Chairman Melissa George said the Great Barrier Reef is part of the spiritual and cultural heritage of thousands of Aboriginal and Torres Strait Islander peoples.

"It is a place of profound cultural importance and our ancestors have looked after it for countless generations.

"With a history spanning over 60 000 years, the Traditional Owners of the Great Barrier Reef maintain strong

connections to their Sea Country. As such partnerships with Traditional Owners are becoming an increasingly important aspect of Marine Park management."

The aim of the program will be met through the delivery of two activities:

- The enhancement of the Traditional Use of Marine Resources Agreements program and Sea Country Management initiatives
- The strengthening of communications and partnerships with Traditional Owners, Indigenous communities, Reef stakeholders and communities.

Work on developing and improving Indigenous partnerships has increased as part of the Reef Rescue Land and Sea Country Indigenous Partnerships Program which is being funded through Caring for our Country.

Tagging turtles and sharing knowledge

A recent turtle tagging exercise in waters off Bowen that brought together Traditional Owners, industry and Marine Park management agency partners was deemed a huge success.

The four day training and interpretive activity saw Girrigin, Giru Dala and Gudjuda organisations representing Traditional Owner groups tag and release 44 turtles between Edgumbe Bay and Abbot Point.

Gudjuda Reference Group Chairman Eddy Smallwood said he hoped the tagging exercise became an annual event.

"This type of exercise gives us the opportunity to teach our kids about our traditional food chain and also to share our knowledge with everyone who participates," he said.

"It also means that we are putting back into the preservation of the turtle population not just using it as a food source.

"Having the younger generations involved is really good too because it means we are bringing our culture back to our Sea Country."

GHD marine biologist Rachel Groom said it was great to see everybody working together.

"There were people ranging in age from 15 to 70.

"It was really hands-on and gave us the opportunity to explain some of the impacts on sea turtle populations at the same time as tagging the turtles."

Rachel said they were also pleased to tag a potential nesting female turtle, however, time will tell if she migrates to her nesting beach.

"We were able to capture a 96cm green turtle that the group named Sarah.

"She was captured in Edgumbe Bay and released at Abbot Point to understand her preferred foraging habitat. She made her way back to her capture point within days," Rachel said.

Sarah's movements were tracked and recorded online at www.seaturtle.org

Some of the tagging was recorded on camera and thanks to a Coast Care grant NQ Dry Tropics Water and Land Solutions will be producing a DVD and developing a presentation that will be taken to Reef Guardian Schools next year.

The activity was funded by the Department of Environment, Water, Heritage and the Arts (DEWHA) and North Queensland Bulk Ports (NQBP).

In-kind support (training, logistics and vessels) was donated by the Department of Environment and Resource Management and consultancy firm GHD.



Volunteer army **watching** the Reef

An army of more than 200 volunteers are closely keeping an eye on corals as summer continues.

The volunteers, who include tourism operators, fishers, researchers, and recreational reef users, are on the look-out for signs of coral stress as part of the Great Barrier Reef Marine Park Authority's (GBRMPA) BleachWatch Program.

GBRMPA Climate Change Director Dr Paul Marshall said information provided by the BleachWatch volunteers helped managers detect the early signs of problems on the Reef, and to target detailed scientific surveys and management responses.

"Warmer than average summer temperatures are stressful to corals and cause the corals to turn white, a response called coral bleaching. If temperatures stay hot, bleached corals can die," Paul said.

"The amount of coral bleaching that occurs in any given summer is an indicator and predictor of the health of the Reef. With climate change, we now have to watch conditions closely every summer.

"Because the Great Barrier Reef is so large, we need as many people as possible looking out for signs of coral reef stress and reporting these back to us so we can make the best possible management decisions.

"Reports received from BleachWatch volunteers provide us with essential information about trends in Reef health and climate impacts.

"This information helps us validate predictive models and satellite data and is critical to the success of the Early Warning System for our Coral Bleaching Response Plan."

BleachWatch reports enable managers to identify highly impacted areas so management strategies can be implemented to help these areas recover more quickly.

In recognition of their outstanding contribution to the BleachWatch Program last summer, the GBRMPA has awarded nine BleachWatch participants Certificates of Appreciation. The recognised BleachWatch volunteers are:

Emily Smart – Fantasea Adventure Cruising, Airlie Beach

Jack Martin – Cairns Dive Centre, Cairns

Brad Lee – Cairns Dive Centre, Cairns

Alan Cousland – AL & PK Cousland Pty Ltd, Yorkey's Knob

Erica Larson – Quicksilver Cruises, Port Douglas

Jim Buck – Queensland Turtle Conservation Project, Lady Musgrave Island

Eric Fisher – Reef Magic Cruises, Cairns

Justin Harzmeyer – previously with Cruise Whitsundays, Airlie Beach



BleachWatch in action

Michelle Landers – Cruise Whitsundays, Airlie Beach

If you would like to join the BleachWatch network or learn more about the program, please contact the BleachWatch coordinator at bleachwatch@gbbrmpa.gov.au or visit the GBRMPA website at www.gbbrmpa.gov.au

Survey **examines** Reef protection

The Australian Bureau of Statistics (ABS) recently released survey results examining farming practices affecting water quality in the Great Barrier Reef catchment area.

One of the environmental pressures facing the Reef comes from catchment run-off in the form of nutrients, pesticides (including herbicides) and sediments entering the Great Barrier Reef.

The Great Barrier Reef's catchment area contains some of the richest farming land in Australia, and Queensland's farmers are under pressure to adopt land management practices to protect creeks and rivers flowing into the Reef.

ABS Environment team spokesperson Dr Michael Vardon said

the survey found major differences across the region in the take up of land management practices.

"The differences in take up can reflect physical conditions such as rainfall patterns, the shape of the land and river locations, as well as social and economic factors," he said.

"For example, mill mud and dunder (by-products of the sugar mills) are widely used as fertiliser and over a million tonnes were used during 2008-09 - but only near sugar mills; controlling run-off from these areas may need a different approach to controlling run-off from areas that receive chemical fertilisers.

"This survey gives environmental researchers a baseline to work with - they can see what is happening in different areas all across the catchment."

The survey was funded under the Australian Governments Reef Rescue Program, and will help target areas

where the major investments are needed to change farming practices.

One of the interesting findings reported by the ABS was the high rate of non-chemical weed and pest controls. A total of 60 per cent of farms reported using mechanical controls (such as mulching), and nearly half (48 per cent) used other non-chemical controls such as biological controls or break cropping.

The survey also found that 73 per cent of farmers employ practices to directly manage surface water run-off and almost all (97 per cent) farmers undertook at least one management practice (such as soil testing) to decide how much fertiliser to apply.

Further details can be found in Land Management Practices in the Great Barrier Reef Catchments, Preliminary, 2008-09 (cat. no. 4619.0) available for free download from the ABS website www.abs.gov.au.

Developing **strong** partnership with northern regional neighbours

Representatives from Coral Triangle Initiative countries visited the Great Barrier Reef Marine Park Authority (GBRMPA) in Townsville recently, strengthening an already solid partnership and taking part in valuable discussion forums.

The Coral Triangle Initiative is located in the Indo-Pacific region with Indonesia (Central and Eastern), Malaysia (Sabah), Papua New Guinea, Philippines, Solomon Islands and Timor-Leste either wholly or partly contained in the Coral Triangle.

GBRMPA Manager of Natural Science and Pew Fellow Dr Laurence McCook said sharing information on lessons learnt is important as it benefits both the management of the Great Barrier Reef and the Coral Triangle.

"Topics such as the use of zoning, benefits of ecosystem based management and sustainable tourism were discussed and perhaps the most important aspect is that managers don't have to reinvent the wheel and waste resources when there is someone who has been there and done that," he said.

Visiting representative from Indonesia's Ministry of Forestry Deputy Director of Conservation Areas for the Division of Marine Conservation, Wetlands and Ecosystem Cherryta Yunia said the managers of the Great Barrier Reef have had much success in finding the right balance between many competing issues when it comes to managing the Reef.

"One of the purposes of visiting northern Queensland and the GBRMPA is to learn and also share information on managing coral reef systems and their surrounding habitats," Cherryta said.

"The balance between marine conservation, socio-economic and income generating issues in the Coral Triangle is very challenging but it is getting better over time."

The Coral Triangle is one of the most biodiverse coral reef systems on earth. On a global scale the relatively close proximity between the Great Barrier Reef and the Coral Triangle means each benefits when their management is strong and effective.

Sustainable farming formula proving **successful**

The Reinaudo family in the Herbert River region have developed a winning formula for environmentally sustainable practices on their cane farm and are reaping the rewards of their efforts.

They're successfully combining industry best practice farming to minimise their environmental impact and maximising the efficiency of costly machinery by increasing production through leasing extra land across different climate types.

The farming foursome – Nelson Reinaudo, brother Vic and Nelson's two sons Darren and Michael – grow cane on 810 hectares that they've divided into high rainfall country and much drier, less fertile country.

The two vastly different microclimates have provided flexibility in planting and harvesting, and their crops and business are also benefiting from the other practices they've introduced.

These include variable rate fertilising, minimal spraying with herbicides, green cane harvesting and trash blanketing, and tighter controls over sediment leaving their farms.

"The less we do on the farm, the less impact we have on the environment," Darren said.

"The Herbert region has special characteristics and you have to work with the climate, which is not consistent. It's good for growing cane but it's difficult to grow other crops.

"We want to grow maximum cane as efficiently and sustainably as possible using existing people and not having to spend too much on additional equipment."

Support from the Australian Government's Reef Rescue Program is helping the family adopt their sustainable farming approach.

GPS guidance equipment and a Mizzi billet mound planter, partly bought with a Reef Rescue grant, will play a key role in future growth and profitable and responsible farming.

The family are reaping the rewards that this new approach has delivered, including fuel and time savings.

The downstream waterways that lead to the Great Barrier Reef are expected to reap the reward of reduced runoff from the farm.

As the experience has been a positive one, the family are also looking to introduce several other environmentally sustainable practices on the farm.



The Reinaudo family on their property – Image courtesy of Canegrowers

Creek clean ups **continue** in Cairns

The Cairns Local Marine Advisory Committee continues to work with their local community to clean up local creeks.

Creek clean ups by the community, for the community have been held at several locations throughout the Cairns area.

Hambledon after school Science Club students were so inspired after taking part in a clean up that two students put pen to paper and wrote a story about their experiences:



Hambledon after school Science Club clean up as part of Cairns LMAC Clean Creek for Cairns campaign

Community creek clean up

Hambledon after-school Science Club members and friends cleaned up along Collinson Creek at Edmonton after school recently as part of the Cairns Local Marine Advisory Committee's Clean Creeks for Cairns clean up. We are a Reef Guardian School and we are keen to be responsible to help clean up the environment.

When we arrived we had a talk about how to ensure that we were safe when helping. We had two different types of sacks – one for recycling and one for normal waste.

The older kids' group walked along the river while the younger group walked along the drain to the end. There was lots of rubbish that we picked up but there was also lots that was too dangerous for us to get because it was up steep banks, or the ground was too slippery.

The older group finished up at the bike jumps and then we met with the other group. Unusual things we found were part of a car, half a bike, a large plank of wood and lots of bottles all tied together. Some of the things were in the water so we had to get a stick to reach them.

We liked helping the environment and this clean up was a good experience because it helped us learn about things we could recycle. We were proud of the effort we put in to help the environment.

*Zach Delacey and Sam Ederveen
Year 6, Hambledon State School*

Local school students target **valuable** wetlands

Schools got down and dirty this year when students stepped out of the classroom to learn about wetlands as part of World Wetlands Day 2010.

This year, all Rollingstone State School students celebrated and acknowledged this year's theme, 'Wetlands, Biodiversity and Climate Change' and participated in a hands-on wetlands education program.

Great Barrier Reef Marine Park Authority (GBRMPA) and Queensland Wetlands Program Project Manager Donna-marie Audas said the 10-week curriculum, for prep to Year 8 focussed on the value of wetlands, particularly the biodiversity of these areas and how wetlands can combat the effects of climate change.

"Students learn all about how important wetlands are because every lesson during Term 1 – from maths to art – focuses on wetlands," she said.

"Students are able to connect with the environment and find out about the exciting role of wetlands.

"Part of the program brings local wetlands scientists into the school to share their skills and teach the students about their work.

"Teachers can draw on the expertise and support of wetlands experts from local, state and federal government agencies and non-government science and conservation bodies.

"It's about partnerships and building capacity in the local community," Donna-marie said.

Schools are encouraged to 'adopt' a local wetland to involve the students in hands-on conservation activities such as fauna and flora surveys and the impacts of land use.

The education package has been developed by the GBRMPA and the

Queensland Wetlands Program, with funding from the Australian Government's Caring for our Country program and the Queensland Government.

In 2009 the education package was successfully trialled in three schools in the Great Barrier Reef region. It will be taught in five schools in Term 1 of 2010, namely Rollingstone State School, Stuart State School, Burdekin Christian College, Pioneer State School and Miriam Vale State School.

The Queensland Wetlands Program, which provides expert information, education, mapping and research to promote the well being and good management of Queensland's wetlands, is funded by the Australian Government and the Queensland Government.

Further information on the education package and the Queensland Wetlands program can be obtained from Donna-marie Audas at GBRMPA on (07) 4750 0845.

Creature Feature

Seahorse

- Rare not only because of their horse-shaped head, seahorses are one of the only species of fish which are monogamous and the only animal species on Earth in which the male bears the unborn young.
- Male seahorses have a pouch on their abdomen which the female utilises when mating to deposit her eggs. The male then fertilises them internally and carries the eggs in his pouch. Over a period of a few weeks the male's pouch becomes swollen until he hatches up to 100 fully-formed miniature seahorses into the water.
- Unusually poor swimmers for fish, seahorses propel themselves by using a small fin on their back that flutters up to 35 times per second.
- To protect themselves in rough seas and to camouflage themselves from their prey, seahorses will use their tails to anchor to seagrasses and corals. They eat plankton and small crustaceans that drift by using their snouts to suck these tiny animals into their mouths.

- The biggest threats to seahorses are humans with millions of dried seahorses traded worldwide, many are taken for the aquarium trade or as incidental by-catch in some commercial fisheries. Destruction and pollution of coastal habitats is also having a major impact on seahorse numbers.



Calendar of events

2010

International Year of Biodiversity

02 February

World Wetlands Day

01 – 07 March

Sea Week
Oceans of Life – ours to explore and conserve

07 March

Clean Up Australia Day

07 – 13 March

Ground Water Awareness Week

22 March

World Water Day

23 March

World Meteorological Day

Brush up on zoning around Cape Bowling Green

Fishers heading out on the water near Cape Bowling Green are urged to brush up on zoning in the area as, due to natural factors, the sand spit in this area is changing.

Natural currents have caused the sand spit to shift. It has moved between Yellow, Blue and Green Zones over time and should not be used as a reference point.

Great Barrier Reef Marine Park Authority Field Management Director Mick Bishop said it was important that everyone who visited this area familiarised themselves with these changes.

"It's important that all fishers planning to visit this location make sure they know where they can go and what they can do," he said.

"Zoning rules still apply and you must know your exact position to know what zone you're in.

"Fishers should consider purchasing a GPS, internationally

recognised as a reliable navigation tool, to be absolutely sure they know where they are."

Signage has been erected in the area to help fishers understand how the sand spit has changed.

Tips for doing the right thing:

- Don't use the sand spit as a reference point
- Use a GPS to determine exactly where you are
- Check the guide on the on-site signage, including the map.



GBRMPA contacts



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