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# DIVERS FOR THE ENVIRONMENT

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## EDA

جمعية الإمارات للغوص  
Emirates Diving Association

**HAWKSBILL TURTLE:** LOCAL SPECIES  
IN THE IUCN RED LIST 2009 **6**

**2010 ARABIAN SEAS**  
WHALE SHARK RESEARCH SYMPOSIUM  
AND WORKSHOP **38**

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# DIVERS FOR THE ENVIRONMENT



**EDA**  
جمعية الإمارات للغوص  
Emirates Diving Association

EDA began a newsletter in 2004 and launched their first quarterly magazine, *Divers for the Environment* at the end of the year with 23 pages. Today, *Divers for the Environment* now has 60+ pages. Each quarter, the magazine reviews environmental issues, local dive news, diving destinations and captures dive features from all

*Divers for the Environment* readers are between the ages of 9-95 who care about their oceans, concerned about our environment today and interested by news about diving lifestyles.

*Divers for the Environment* appeals to both male and female divers across the UAE and globally from a range of nationalities.

*Divers for the Environment* is a free publication to members & magazine contributors and is circulated to the public through EDA events and exhibitions. The magazine can also be downloaded from the EDA website ([www.emiratesdiving.com](http://www.emiratesdiving.com)) as a PDF. We currently have over 1,000+ EDA members (including local and international members) and we are constantly growing.

## Marketing Solutions

Within today's fast paced world, it becomes more important for companies to develop their identity that distinguishes them from the rest of the industry.

When partnering with EDA's *Divers for the Environment*, a company is able to associate itself with a common interest in caring for the environment, diving locally and internationally, and diving cultures. EDA assists brands in reaching out to the targeted audience and consumers and it allows EDA to continue with the research and voluntary work we care so much about.



**EDA**  
DIVERS FOR THE ENVIRONMENT

DECEMBER 2009, VOLUME 5, ISSUE 4

DIVING AT  
GARDENS OF

SHARKS  
CAN WE PROTECT  
SHARKS?

MUSAN  
EXPERIENCE



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Organisation registered in the UAE General  
Authority of Youth & Sports Welfare.





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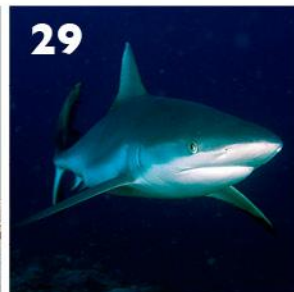
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### DIVERS FOR THE ENVIRONMENT

Please note that EDA's magazine, "Divers for the Environment" includes articles written by individuals whose opinions, whilst valid, may or may not represent that of EDA. It is hoped that the magazine can become a platform for individuals to voice their opinion on marine and diving related issues. You are welcome to submit an article for the next issue of "Divers for the Environment" released in September 2010. Send all articles, feedback or comments to: [magazine@emiratesdiving.com](mailto:magazine@emiratesdiving.com).

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PHOTO BY HUSSAIN AL QALLAF



RECYCLE THIS MAGAZINE AFTER YOU HAVE READ IT.



# DIVING...

## A LIFESTYLE ACROSS ALL GENERATIONS



IBRAHIM N. AL-ZU'BI  
EDA Executive Director

As this country develops around us at lightning speed, many may think that some of the marine traditions are at risk of being lost forever. However, the Annual Sir Bu Naair Traditional Dhow Race is proof that the country is determined to hold on to its history as a centre for pearl divers.

I joined these passionate and experienced divers aboard EDA's traditional dhow *Keefan* for a full day of traditional pearl diving and collecting oysters. I watched as dozens of dhows raced in a recreation of how pearl divers used to in the past. However, the highlight of the day had to have been listening to Faraj Butti Al Muhairbi, Chairman of EDA, recall his early pearl diving memories. Although he was 10 at the time, (and is now a young 70 years old) his memory is as sharp as ever and his conversation mesmerizing. He spoke of how they used to endure months of hardship away from their families, relying only on the stars for direction to bring them back home safely. He spoke of how their long day began at sunrise and ended at sunset, stopping only to eat a few dates and pray. This was their life for four months during the long diving season and for several weeks during the short diving season. For him, and for many others, diving still remains not only a passion but a lifestyle. For our generation, the culture of diving has also become a lifestyle, where we are seeing our small community getting bigger everyday and leading the way into marine conservation.

Watching Faraj and his mates diving using modern scuba gear made me think more about the evolution of scuba diving itself. As scuba diving developed and progressed, our lives as divers have become easier and safer.



At the same time, it acts as a reminder for us to appreciate the rich pearl diving history we have in the UAE.

Being a part of the Emirates Diving Association family makes us lucky enough to not only hear about such unforgettable diving experiences but also to live them in different parts of the world. Joining other EDA members on our Annual Maldives Dive Trip allowed us to collectively experience how healthy and colourful the coral reefs still are in that part of the world, despite the increasing human and natural pressures.

In this issue, you can read about passionate divers making an impact through Reef Check and Sharkquest Arabia. You can also read about how successful DMEX 2010 was. As dive centers and retailers that participated will tell you, they received a lot of positive response from divers interested to buy and learn more about diving in the UAE. Read about EDA's participation in the London Dive Show where even more partnerships and friendships were formed.

I hope you enjoy reading this issue as much as we enjoyed developing it for you.

Keep your dive stories and memories coming through to us. This is where the rest of the community will read about them.

Eco Regards,

Ibrahim Al-Zu'bi





# DMEX MARCH 2010

EDA teamed up with the Dive Middle East Exhibition (DMEX) for the fifth time this year from the 9-13 March running alongside The Dubai International Boat Show (DIBS) for the fourth time.

There was a positive buzz around the dive section, which attracted both dive enthusiasts and new comers curious about diving. Exhibitors ranged from dive operators/retailers to tourism boards supplying a little something for everyone. The dive pool, which was located indoors, brought in the crowds of interested onlookers as dive and free diving demonstrations were being conducted on a regular basis.

The first DMEX trade show in the Middle East hosted by EDA was held in 2005 under the patronage of H.H. Sheikh Maktoum bin Mohammed bin Rashid Al Maktoum. The two-day event was first held at the Madinat Convention Centre and saw 33 exhibitors from the UAE, Oman, Qatar, Kuwait, Egypt, Malaysia, Seychelles, France & the US representing dive retailers, dive manufacturers, tourism companies, environmental organizations and other marine related companies.

Exhibits included the latest on dive equipment, technical diving specialties as well as the diving history of the UAE. Added attractions were the presentations, a fashion show that showcased the latest dive fashions, educational events aimed at children and dive enthusiasts and an underwater photography competition judged by two internationally respected local underwater photographers, Carol Harris and Jonathan Ali Khan.

The first DMEX that was held alongside the Dubai International Boat Show at the Dubai International Marine Club, Mina Seyahi was in March 2007. Building on the rapid rise in popularity of diving in the region, DMEX provided a natural meeting point for divers and marine leisure enthusiasts.

With a total of 21 exhibitors participating, EDA hosted a series of diving demonstrations from wireless underwater communication, to underwater photography and a presentation on breathing techniques held by world renowned free diver, Emma Farrell.

For more information on DMEX 2011, please contact the DMEX Team  
Tel: +971 4 308 6451  
Fax: +971 4 318 8607  
Email: boatshow@dwtc.com





# FEATURED CREATURE

## HAWKSBILL TURTLE

(*Eretmochelys imbricata*)

FEATURE **IUCN RED LIST** – MORTIMER, J.A & DONNELLY, M. PHOTOGRAPHY **MARINE PHOTOBANK**



An endangered hawksbill sea turtle juvenile swims in a pool at a sanctuary. Photo by Valerie Craig/Marine Photobank.

### Local Species in the IUCN Red List 2009

#### RED LIST CATEGORY & CRITERIA: **CRITICALLY ENDANGERED**

Scientific Name: *Eretmochelys imbricata*

Common Name: Hawksbill Turtle

**Geographic Range:** The Hawksbill has a circumglobal distribution throughout tropical and, to a lesser extent, subtropical waters of the Atlantic Ocean, Indian Ocean, and Pacific Ocean. Hawksbills are migratory and individuals undertake complex movements through geographically disparate habitats during their lifetimes. Hawksbill nesting occurs in at least 70 countries, although much of it now only at low densities. Their movements within the marine environment are less understood, but Hawksbills are believed to inhabit coastal waters in more than 108 countries.

**Population Trend:** Decreasing

**Habitat and Ecology:** Hawksbills nest on insular

and mainland sandy beaches throughout the tropics and subtropics. They are highly migratory and use a wide range of broadly separated localities and habitats during their lifetimes. Available data indicate that newly emerged hatchlings enter the sea and are carried by offshore currents into major gyre systems where they remain until reaching a carapace length of some 20 to 30cm. At that point they recruit into a neritic developmental foraging habitat that may comprise coral reefs or other hard bottom habitats, sea grass, algal beds, or mangrove bays and creeks. As they increase in size, immature Hawksbills typically inhabit a series of developmental habitats, with some tendency for larger turtles to inhabit deeper sites. Once sexually mature, they undertake breeding migrations between foraging grounds and breeding areas at intervals of several years. Global population genetic studies have demonstrated the tendency of female sea turtles to return to breed at their natal rookery, even though as juveniles they may have foraged at developmental habitats

located hundreds or thousands of kilometres from the natal beach. While Hawksbills undertake long migrations, some portion of immature animals may settle into foraging habitats near their beaches of origin.

#### LIFE HISTORY PARAMETERS

**Age at maturity:** Hawksbills mature very slowly, taking 20 to 40 years, and so are long-lived. In the Caribbean and Western Atlantic, Hawksbills may mature in 20 or more years. Age to maturity in the Indo-Pacific requires a minimum of 30-35 years. In north-eastern Australia, first breeding is estimated to occur at 31-36 years for females and 38 years for males.

**Maximum size (total length):** 62.50 to 114cm; avg. 87cm

**Lifespan:** thought to be about 30 to 50 years

**Roles in the Ecosystem:** Like other species of sea turtles, Hawksbills contribute to marine and coastal food webs and transport nutrients within the oceans. Hawksbills are important components of healthy coral reef



ecosystems and are primarily spongivorous in the Caribbean, but more omnivorous in the Indo-Pacific. They consume relatively large amounts of algae in northern Australia, soft corals in the Great Barrier Reef region, and other combinations of forage depending on habitat. At sites where they are primarily spongivorous, Hawksbills have been found to support healthy reefs by controlling sponges which would otherwise out-compete reef-building corals for space.

#### Threats:

1. Tortoiseshell Trade;
2. Egg Collection;
3. Slaughter for Meat Destruction of Nesting Habitat;
4. Destruction of Foraging Habitat;
5. Hybridisation of Hawksbills with Other Species;
6. Entanglement and Ingestion of Marine Debris – including Fishing Gear;
7. Oil Pollution

#### CONSERVATION ACTIONS

**Treaties and Agreements:** Hawksbills benefit globally from inclusion in CITES, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (listed on Appendix I) and CMS, the Convention on Migratory Species (listed on Appendices I and II). Regional agreements also help to conserve Hawksbills and their habitats (see Regional Summaries, Appendix II).

**Public Awareness:** Interest in Hawksbills and other species of marine turtles is at an all-time high around the world. Interest in ecotourism is growing.

**Capacity building:** Increasing numbers of biologists and conservationists focusing on sea turtles around the world benefit hawksbills.

**Protected Areas:** Nesting and foraging sanctuaries protect Hawksbills although effective enforcement remains an elusive goal in many.

**Legislation and Enforcement:** Numerous countries have temporarily or permanently banned all exploitation of sea turtles and their eggs and are attempting to improve enforcement of international bans on the tortoiseshell trade.



Photo by Actor212/Marine Photobank

From: Mortimer, J.A. & Donnelly, M. 2008. *Eretmochelys imbricata*. In: IUCN 2010. IUCN Red List of Threatened Species. Version 2010.1. [www.iucnredlist.org](http://www.iucnredlist.org)

# LONDON DIVE SHOW 2010

The London International Dive Show (LIDS 2010) took place in Excel, London, on the 27<sup>th</sup> and 28<sup>th</sup> of March 2010.

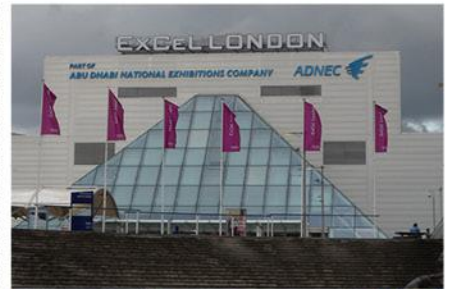
The hall itself was large and contained more than 225 exhibitors offering the very latest dive gear, holidays, training courses, camera equipment, leisurewear, books and everything else a diver may require.

A large number of non-profit organizations were also present, highlighting their latest conservation and protection efforts for the ocean and the ocean's animals i.e. Sea Shepherd, Shark Trust, Save our Seas, Coral Cay Conservation etc.

There were two small demo pools on either side of the hall where exhibitors were demonstrating dive gear, doing trial dives and entertaining visitors with their ongoing demos.

We are pleased to mention that Al Boom Diving was at the exhibition, along with Le Méridien Al Aqah.

It was all in all a great event and next year we are hoping to be present at LIDS 2011!





# CRITICALLY ENDANGERED TURTLE BEGINS NESTING ON BU TINAH ISLAND

## PRESS RELEASE

April 24, 2010

Sea Turtle begins nesting on Bu Tinah



A group of critically endangered sea turtles have begun nesting on Bu Tinah Island, according to researchers from the Environment Agency-Abu Dhabi (EAD) who are surveying the island's unique biodiversity. Last week, 5 nests were confirmed by EAD experts and the number is expected to increase over the next coming months.

The Hawksbill turtles have been observed arriving onto the beach to nest as night falls on the Island. They were seen to be digging a pit in the sand, laying their eggs, covering it with sand and then returning to the sea.

"Bu Tinah Island's beaches provide a quiet and peaceful nesting ground for Hawksbill turtles. This is yet another reason why Bu Tinah Island deserves to be one of the New 7 Wonders of Nature. We urge people to vote for it," said Thabit Al Abdessalaam, Director of EAD's Biodiversity Management Sector.

Although a clutch of Hawksbill eggs usually consists of 80 to 125 eggs, the majority of hatchlings do not make it to adulthood as they get preyed on by seabirds or crabs. In a testament to the wonder of Mother Nature, female hatchlings that survive to adulthood return to the same nesting beaches where they were hatched.

Hawksbill sea turtles are listed as critically endangered under the IUCN Redlist and are the only sea turtles known to nest on Abu Dhabi's offshore islands. Globally, hawksbill turtle populations declined due to

the historical trade in their tortoiseshell. Other threats include the loss of nesting beaches due to coastal development, loss of foraging habitats, marine debris, accidental hits from boat propellers and accidentally getting caught in fishermen's nests.

In March 2010, the Environment Agency – Abu Dhabi (EAD) launched an international campaign to encourage people to vote for Bu Tinah Island, as one of the New 7 Wonders of Nature. Bu Tinah Island was shortlisted among 28 finalists from a list of 447 sites and the New 7 Wonders of Nature will be declared on November 11, 2011. The campaign was launched under the patronage of H.H. Sheikh Hamdan bin Zayed Al Nahyan, the Ruler's Representative in the Western Region and Chairman of EAD.

Bu Tinah Island, located around 130km west of Abu Dhabi, is a core area of the Marawah Marine Biosphere Reserve – the first marine biosphere reserve in the region. The Island is unique; in spite of the harsh temperatures and salinity, its habitats and species, including coral, seagrass, dugongs and sea turtles, continue to thrive, making the island an important location for climate change studies.

### 7 REASONS TO VOTE FOR BU TINAH ISLAND

1. **Coral Reefs:** Their survival, despite the harsh environment, has given researchers insight into coral reef survival elsewhere in the world in the face of global warming.
2. **Natural Mangroves:** They reach an average height of 5 meters and support wildlife including birds, fish and crustaceans.
3. **Hawksbill Turtles:** Every year, these critically endangered species arrive to Bu Tinah Island to nest.
4. **Dugongs:** These threatened species are often spotted swimming among the Island's extensive seagrass meadows. They have been able to live without disturbance in a clean natural sanctuary, thanks to EAD's management of the marine biosphere reserve.
5. **Dolphins:** The Indo-Pacific humpback, bottlenose and common dolphins swim around the Island.
6. **Ospreys:** Bu Tinah Island is a major breeding site for this globally important bird.
7. **Sooty Cormorants:** Bu Tinah Island is a roost site for about 20,000-25,000 of these birds.

### HOW CAN YOU VOTE FOR BU TINAH ISLAND?

Vote online at [www.butinah.ae](http://www.butinah.ae) (only one vote per e-mail address)

Or

Send an SMS with the word 'BU TINAH' to 3888 (You can vote as many times as you wish. Costs are AED 2 per SMS)

### ABOUT ENVIRONMENT AGENCY – ABU DHABI (EAD)

The Environment Agency – Abu Dhabi (EAD) is a governmental agency that was established in 1996. We are committed to protecting and managing biodiversity, providing a clean environment and promoting Sustainable Development in the Emirate of Abu Dhabi. We provide a direction for Government, business and the community to build environmental considerations into the way they plan and live without compromising Abu Dhabi development. Since 2008, EAD has been awarded ISO 9001 for Quality; ISO 14001 for Environment and ISO 18001 for Health and Safety.

### For Further Information, Please Contact:

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# CITES TURNS DOWN MOST BIDS TO REEL IN SHARK OVERFISHING

PHOTOGRAPHY **MARINE PHOTOBANK**

## PRESS RELEASE

March 23, 2010

Doha, Qatar – Governments of a United Nations meeting on wildlife trade today voted against better international trade controls for five shark species, which are in severe decline because of overfishing for their high-value fins and meat.

The Convention on International Trade and Endangered Species of Wild Fauna and Flora (CITES) governments voted against proposals to list three hammerhead sharks (scalloped, great and smooth), the oceanic whitetip and the spiny dogfish on Appendix II of the Convention, which would enforce better management of the fishery for international commercial trade and allow their declining populations to recover.

However, governments did vote to include the porbeagle shark – overfished primarily for its meat and fins – on Appendix II.

"Once again CITES has failed to listen to the scientists. The decision not to list all of these sharks today is a conservation catastrophe for these species," said Glenn Sant, Global Marine Programme Co-ordinator for TRAFFIC.

"Populations of these sharks have declined by more than 90% in some areas, many of them caught illegally and destined to end up in the shark-fin trade. They are targeted because of their high value."

"The current level of trade in these species is simply not sustainable."

The proposals' rejection follows the failure of other proposals at CITES last week to introduce stronger trade restrictions for red and pink corals, and an outright ban on the international commercial trade of Atlantic bluefin tuna – both despite overwhelming scientific evidence that additional protection for these species is needed.

"These marine species are in dire need of stronger trade protections and sound management. We will continue to fight for this," said Carlos Drews, Director, Species Programme, WWF International. "The vitality of our oceans upon which millions of people depend, relies on healthy populations of species such as sharks and corals."

The sharks discussed at today's meeting are particularly vulnerable to overfishing because they are all slow growing, late to mature, long-living and produce few young, which means it is difficult for populations to recover from overfishing.

TRAFFIC, the wildlife trade monitoring network, is a joint program of WWF and the International Union for Conservation of Nature (IUCN).

The 15<sup>th</sup> meeting of CITES governments began March 13 and ended on the Thursday, and will consider proposals related to dozens of species and species trade issues.

### For more information, please contact:

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Tel (Qatar): +974 761 8288  
Email: richard.thomas@traffic.org

## ABOUT WWF

WWF is one of the world's largest and most respected independent conservation organizations, with almost 5 million supporters and a global network active in over 100 countries. WWF's mission is to stop the degradation of the earth's natural environment and to build a future in which humans live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption.

[www.panda.org/cites/media](http://www.panda.org/cites/media) for latest news and media resources about the CITES meeting, or follow us on Twitter @wwf\_media.

## ABOUT TRAFFIC

TRAFFIC, the wildlife trade monitoring network, works to ensure that trade in wild plants and animals is not a threat to the conservation of nature. TRAFFIC is a joint programme of IUCN and WWF.

[www.traffic.org](http://www.traffic.org)





## SECOND HAND DIVE EQUIPMENT MARKET DIVE RETAIL PLATFORM FOR INDEPENDENT & COMMERCIAL INDUSTRY

**Location:** Diving Village, Shindagha Tunnel Area

**Date:** Saturday, 22<sup>nd</sup> May, 2010

**Time:** 16.00 - 22.00

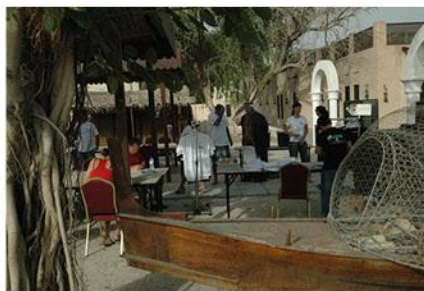
**Price:** Dhs 200/table

EDA held their first dive equipment market day and social at the Diving Village, with amazing retailer discounts. Many thanks to Al Masood, Al Boom Diving and Premiers For Equipment for being a part of this new and exciting event. Also, a big thank you to our second hand equipment vendors! They had equipment on sale, a museum would have envied. For those interested in selling their second hand equipment, it is always a nice idea to share a table with others and split the cost during these events.

The local food catered by the Emirati women from the Heritage Village and the live music entertainment performed by the 24 young Emiratis was fantastic and really worked well within the Diving Village's atmosphere that evening.

EDA have created this new platform to cater to everyone within the diving community; all divers, independent instructors, dive centres and dive services. This is the perfect opportunity to recycle second hand dive equipment for those in search of second hand material and to sell or buy new or old retail stock equipment at discounted prices for personal, professional and commercial use!

It is also a great opportunity for an EDA Social get together incorporated within the event and provide an event with a difference for everyone. Congratulations goes out to our Reef Checkers who received their certificates. We already have plenty of new ideas for the next Dive Equipment Market when the weather gets cooler.





# REEF CHECK CERTIFICATES

EDA would like to congratulate all the new members that got their Reef Check training certificates. The certificates were given during the EDA Social and Dive Equipment Market at the Diving Village as well as in Six Senses Hideaway – Zighy Bay. The new Reef Check volunteers can now join EDA in our monthly surveys in Al Aqah and Dibba. Well done!



# RAFFLES SCHOOL ECO-AWARENESS MORNING

On Thursday 22<sup>nd</sup> April, EDA participated in the Raffle's School Eco-Awareness morning, along with several other exhibitors.

There were hundred's of visitors at the event consisting of students, parents and teachers. Visitors were free to wander around the area, approach the exhibitors and inquire about the products or activities the participants were showcasing.





## PATRICK MUSIMU VISITS EDA



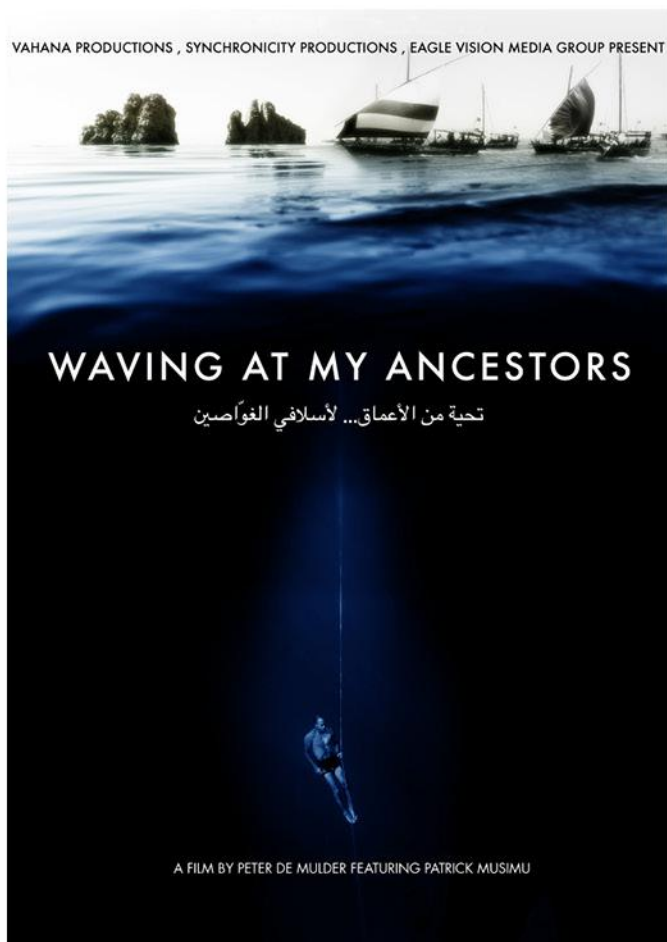
Juma'a Bin Thalet being interviewed

We were pleased to welcome Patrick Musimu, Peter De Mulder and Peter's film crew to our EDA offices on Wednesday the 7<sup>th</sup> of April, where we met and chatted about the documentary they are filming called 'Waving at my Ancestors'. To read more about the film, please check: <http://wavingatmyancestors.blogspot.com/>

After showing them around and meeting the EDA team, they proceeded to interview Juma'a Bin Thalet, the Manager of the Heritage Department of EDA, who gave them an insight on the history of pearl diving in the UAE.

Patrick, Peter and the crew will be back to do more filming in the UAE and Musandam in July.

Patrick Musimu is a multiple free-diving world record holder. In June 2005, he reached the mythical mark of 200 meters.



## THE ART OF APNEA: THE HERITAGE OF PEARL DIVERS AND THE FUTURE OF FREE DIVING IN ABU DHABI

On Wednesday 3<sup>rd</sup> of March, EDA – Abu Dhabi organised a Marine Talk, 'The Art of Apnea: the Heritage of Pearl Divers and the Future of Free diving in Abu Dhabi' in conjunction with ADMA-OPCO, AIDA, and Al Mahara Diving Centre.

**Synopsis:** Freediving has particular importance for Abu Dhabi where pearls brought wealth to the region before oil and gas. So how do freedivers manage to hold their breath for so long and dive so deep? This interesting and informative presentation is an opportunity to connect to the UAE heritage of pearl diving and learn about the modern world of Freediving.

A welcome and introduction speech was given by Kathleen Russell and Mr. Ibrahim Al Zub'i, EDA's Executive Director; followed by Juma'a's presentation on The History of Pearl Diving. Emma Farrell then gave her talk on The Art of Apnea.

### GUEST SPEAKERS' BIOGRAPHIES: EMMA FARRELL

Emma has 7 years experience teaching free diving around the world. She is a founding member of AIDA (the Worldwide Federation for breath hold diving) International Education Commission. Emma also chaired the British Freediving Association between 2004 and 2006 and has competed in numerous international freediving competitions.

### Juma'a Bin Thalet

EDA's Heritage Department Manager is a dedicated young local pearl (as well as rescue) diver. He is responsible for creating awareness in all schools, colleges and universities with regard to the Pearl Dive culture of the UAE. Juma'a is also responsible for EDA's Heritage Exhibition.

## CLIMATE CHANGE INTERESTING LINKS AND RESOURCES

<http://www.nature.org/initiatives/climatechange/>

[http://wwf.panda.org/what\\_we\\_do/footprint/climate\\_carbon\\_energy/climate\\_deal/](http://wwf.panda.org/what_we_do/footprint/climate_carbon_energy/climate_deal/)

<http://climate.org/>

<http://www.ipcc.ch/>

[http://www.pewclimate.org/docUploads/Coral\\_Reefs.pdf](http://www.pewclimate.org/docUploads/Coral_Reefs.pdf)

<http://data.iucn.org/dbtw-wpd/edocs/2006-042.pdf>





## EDA SCREENING OF **THE AGE OF STUPID** AT **CINESTAR**, MALL OF THE EMIRATES

★★★★★ "YOU WON'T SEE A MORE IMPORTANT FILM THIS YEAR"  
NEWS OF THE WORLD

SPANNER FILMS AND EMIRATES DIVING ASSOCIATION PROUDLY PRESENT  
AN IndieScreening OF

# THE AGE OF STUPID

I defy anyone to come out and not feel like they've got to make a difference.  
CAROLINE LUGAS, LEADER OF THE GREEN PARTY

NEWS OF THE WORLD  
THE TELEGRAPH  
THE FINANCIAL TIMES  
THE TIMES

**CineStar Cinemas**

**CINESTAR, MALL OF THE EMIRATES**  
**WEDNESDAY 21ST APRIL AT 7.30PM**  
To register email: [projects@emiratesdiving.com](mailto:projects@emiratesdiving.com)  
(Exclusively for EDA Members)

THE CLIMATE BLOCKBUSTER FROM THE DIRECTOR OF **McLIBEL**

SPANNER FILMS THE AGE OF STUPID IndieScreenings NOT STUPID EDA

[www.spannerfilms.net](http://www.spannerfilms.net) [www.ageofstupid.net](http://www.ageofstupid.net) [www.indiescreenings.net](http://www.indiescreenings.net) [www.notstupid.org](http://www.notstupid.org) [www.emiratesdiving.com](http://www.emiratesdiving.com)



On Wednesday 21st April, EDA screened *The Age of Stupid* at CineStar, Mall of The Emirates.

### SYNOPSIS

'The Age Of Stupid' is the new documentary-drama-animation hybrid from Director Franny Armstrong (McLibel, Drowned Out) and Oscar-winning Producer John Battsek (One Day In September, Live Forever, In the Shadow of the Moon).

Oscar-nominated Pete Postlethwaite (In The Name of the Father, Brassed Off, The Usual Suspects) stars as an old man living in the devastated world of 2055. He watches 'archive' footage from 2008 and asks: Why didn't we stop climate change when we had the chance?

Runaway climate change has ravaged the planet by 2055. Pete plays the founder of The Global Archive, a storage facility located in the (now melted) Arctic, preserving all of humanity's achievements in the hope that the planet might one day be habitable again. Or that intelligent life may arrive and make use of all that we've achieved. He pulls together clips of "archive" news and documentary from 1950-2008 to build a message showing what went wrong and why. He focuses on six human stories.

To find out more about the film, go to: <http://www.ageofstupid.net>

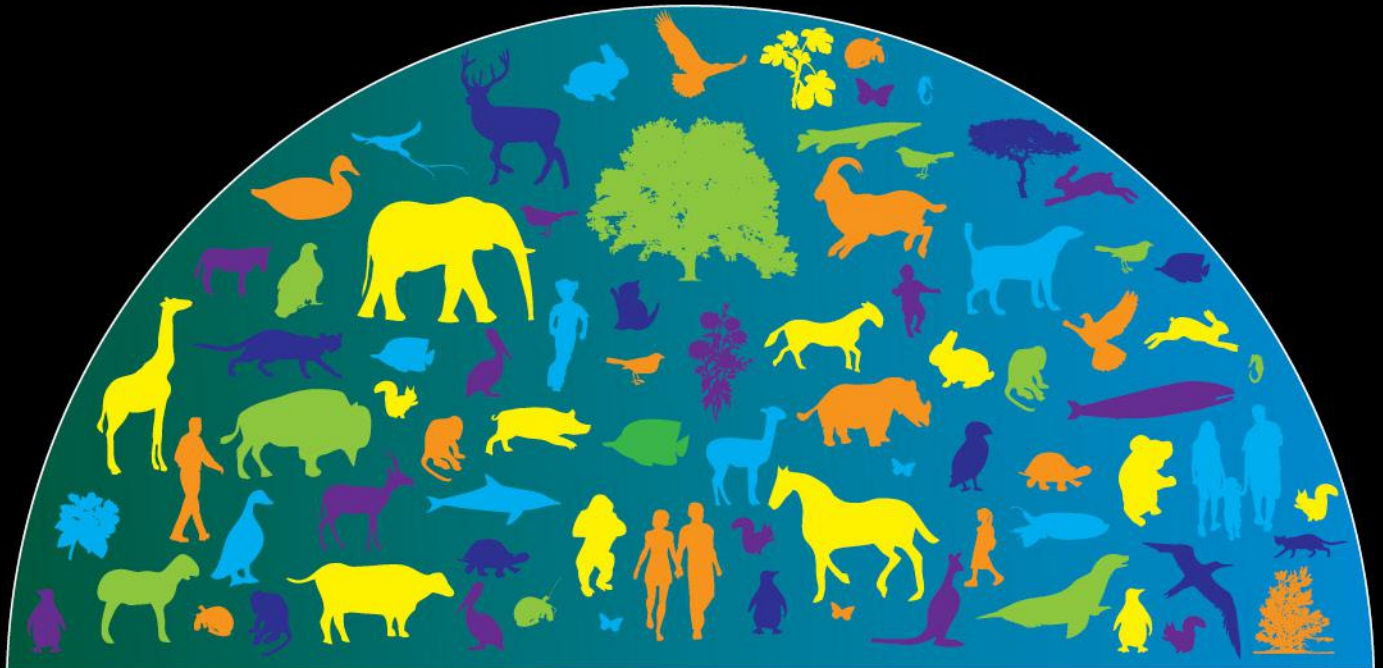
EDA would like to thank CineStar for being such great partners of EDA and a big thank you goes to Mr. Toni El Massih – Manager of Concessions and Cinemas for supporting EDA's environmental initiatives.



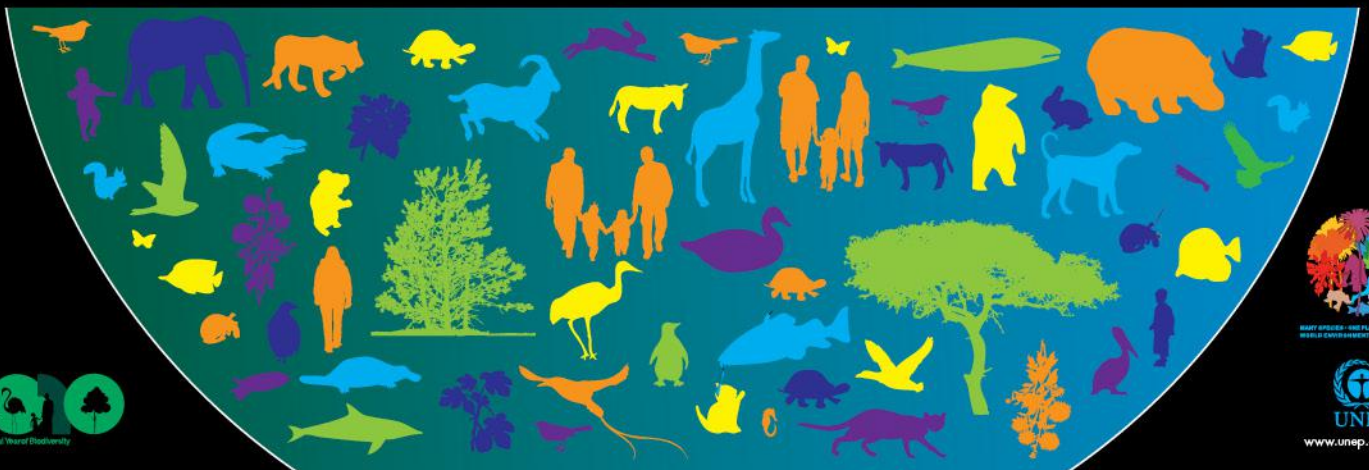
2 W O E 1 D O

World Environment Day Celebrates  
The International Year of

# Biodiversity



**Many Species. One Planet. One Future.**



Design: Alan Peckolick, USA © 2010 www.alanpeckolick.com





# WORLD ENVIRONMENT DAY

## MANY SPECIES. ONE PLANET. ONE FUTURE. 5 JUNE 2010

FEATURE UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP)

### WED 2010 URGES ACTION TO STOP BIODIVERSITY LOSS

Did you know that you are one in a million? Or more precisely, one of millions on this wondrous planet – anywhere in fact between an estimated 5 to 100 million species. If you think about it that means there is a lot we still don't know about our planet, or whom we share it with. We do know though that humans are among only a handful of species whose populations are growing, while many animals and plants are becoming rarer and fewer.

A total of 17,291 species are known to be threatened with extinction, but this is just the tip of the iceberg; many species disappear before they are even discovered. Human activities are mostly to blame – what we use, where we live and what we consume, all have an impact on the Earth's resources.



**MANY SPECIES • ONE PLANET • ONE FUTURE**  
**WORLD ENVIRONMENT DAY • 5 JUNE 2010**



United Nations Environment Programme

As a result, we are risking the loss of the very foundation of survival. The variety of life – known as 'biodiversity' – gives us our food, clothes, fuel, medicine and much more. When one species is taken out of the intricate web of life, it can trigger a domino effect with unforeseen consequences.

At the same time, humans do have the power to stem the tide of extinction. Through conservation action, we have brought species back from the brink and restored vital natural habitats. But, we need to do much more and faster.

The United Nations has declared 2010 the International Year of Biodiversity to stress the importance of biodiversity for human well-being and encourage a redoubling of our efforts to reduce biodiversity loss. The theme of World Environment Day (WED) 2010, "Many Species. One Planet. One Future." echoes this urgent call to conserve the diversity of life on our planet.

### WED 2010 AIMS TO BE THE BIGGEST DAY FOR ENVIRONMENTAL ACTION

World Environment Day (WED) 2010 aims to be the biggest, most widely celebrated, global day for positive, environmental action.

Commemorated on 5 June since 1972, WED is one of the principal vehicles through which the UN stimulates worldwide awareness of the environment and encourages political attention and action.

Through WED, we are able to give a human face to environmental issues and enable people to realize not only their responsibility, but also their power to become agents for change in support of sustainable and equitable development.

WED is also a day for advocating partnerships among all stakeholders or perhaps, even more correctly, among all species living on this one planet and sharing a common future.

WED 2010 could be the biggest WED celebration ever and we count on you to make this happen! We call for action – organize a neighborhood clean-up, stop using plastic bags and get your community to do the same, plant a tree or better yet organize a collective tree planting effort, walk to work, start a recycling drive...the possibilities are endless.

WED 2010 will be hosted by Rwanda, under the theme: "Many Species. One Planet. One Future."

### INSPIRING EXAMPLES

Every year people around the globe celebrate WED in a variety of ways, including street rallies, green concerts, essay and poster competitions in schools, tree planting, recycling efforts, clean-up campaigns and much more. In 2009, there were WED activities registered on the website from more than 80 countries.

**West Asia:** IRAQ • JORDAN • KUWAIT • LEBANON 2003 World Environment Day Global Host • OMAN • QATAR • SAUDI ARABIA • UNITED ARAB EMIRATES •

**North America:** CANADA • UNITED STATES OF AMERICA 2005 World Environment Day Global Host •

**Latin America and the Caribbean:** ANTIGUA AND BARBUDA • ARGENTINA • BAHAMAS • BELIZE • BRAZIL • CHILE • COLOMBIA • COSTA RICA • CUBA 2001 World Environment Day Global Host • DOMINICAN REPUBLIC • ECUADOR • GRENADA • GUYANA • HAITI • JAMAICA • MEXICO 2009 World Environment Day Global Host • NICARAGUA • PANAMA • PARAGUAY • SAINT LUCIA • TRINIDAD AND TOBAGO • URUGUAY •

**Europe:** ALBANIA • ARMENIA • AUSTRIA • AZERBAIJAN • BELGIUM • BOSNIA & HERZEGOVINA • BULGARIA • CROATIA • CYPRUS • CZECH REPUBLIC • FINLAND • FRANCE • GEORGIA • GERMANY • GREECE • IRELAND • ITALY 2001 World Environment Day Global Host • LITHUANIA • MACEDONIA • MALTA • MOLDOVA • MONACO • MONTENEGRO • NETHERLANDS • NORWAY 2007 World Environment Day Global Host • POLAND • PORTUGAL • ROMANIA • RUSSIAN FEDERATION • SERBIA • SLOVAKIA • SPAIN 2004 World Environment Day Global Host • SWITZERLAND • TURKEY • UKRAINE • UNITED KINGDOM •

**Asia and the Pacific:** AFGHANISTAN • AUSTRALIA 2000 World Environment Day Global Host • BANGLADESH • BHUTAN • BRUNEI • CAMBODIA • CHINA 2002 World Environment Day Global Host • COOK ISLANDS • FIJI • INDIA • INDONESIA • IRAN • JAPAN • KAZAKHSTAN • KOREA (DPR) • KYRGYZSTAN • LAO PDR • MALAYSIA • MALDIVES • MICRONESIA • MONGOLIA • MYANMAR • NEPAL • NEW ZEALAND 2008 World Environment Day Global Host • PAKISTAN • PAPUA NEW GUINEA • PHILIPPINES • SINGAPORE • SRI LANKA • TAHITI • TAJIKISTAN • TIMOR-LESTE • TONGA • UZBEKISTAN • VIETNAM •

**Africa:** ALGERIA 2006 World Environment Day Global Host • ANGOLA • BENIN • BOTSWANA • BURKINA FASO • BURUNDI • CAMEROON • CENTRAL AFRICAN REPUBLIC • CHAD • DEMOCRATIC REPUBLIC OF THE CONGO • REPUBLIC OF THE CONGO • EGYPT • ETHIOPIA • GABON • THE GAMBIA • GHANA • GUINEA • GUINEA-BISSAU • KENYA • LESOTHO • LIBERIA • LIBYA • MADAGASCAR • MAURITIUS • MOROCCO • MOZAMBIQUE • NAMIBIA • NIGERIA • RWANDA 2010 World Environment Day Global Host • SENEGAL • SIERRA LEONE • SOMALIA • SOUTH AFRICA • SWAZILAND • TANZANIA • UGANDA • ZIMBABWE •



# School's Out... Let's Go Diving!



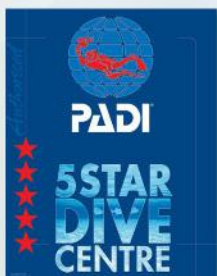
## Learn to Scuba Dive

## Learn about Marine Life

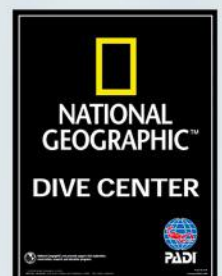


### Join our summer program today!

- Get qualified to dive anywhere in the world!
- Special rates for kids over the summer vacation.
- Qualified divers can dive twice a week for FREE to survey our house reef. See the marine life grow!
- Limited places, booking is essential!



**Atlantis Dive Centre**  
Atlantis, The Palm, Dubai  
04 426 3000  
[www.atlantisdivecentre.com](http://www.atlantisdivecentre.com)  
[reception@atlantisdivecentre.com](mailto:reception@atlantisdivecentre.com)





# FREE FAMILY FRIDAY FUN AT ATLANTIS DIVE CENTRE

Bored with brunching? Sick of shopping? Then why not come and try something completely different at Atlantis Dive Centre?

Fridays are all about family time in Dubai, and at Atlantis Dive Centre it's no different – so join us for our 4F's event – Free, Family, Friday, Fun. Every Friday from 3-5pm Atlantis Dive Centre runs a free family open day. Whether you're already an avid diver or simply want to see what all the underwater fuss is about, just grab the family and drop in.

The family-friendly open day is held in our indoor salt water pools, the only ones of their kind in the UAE. Our 3m and 3.5m deep pools – complete with a mini submarine to explore – allow novice divers to experience the buoyancy of salt water indoors, in a completely controlled setting. As a perfect teaching environment, every Friday our experienced instructors are on hand to run Bubblemakers sessions for kids aged 8-10 and Discover Scuba programmes for children aged 10, Mums and Dads.

The 4F's runs this Friday and every Friday, but bookings are essential so please call us on 04 426 3000 to reserve your family's free space. Hope to see you soon!

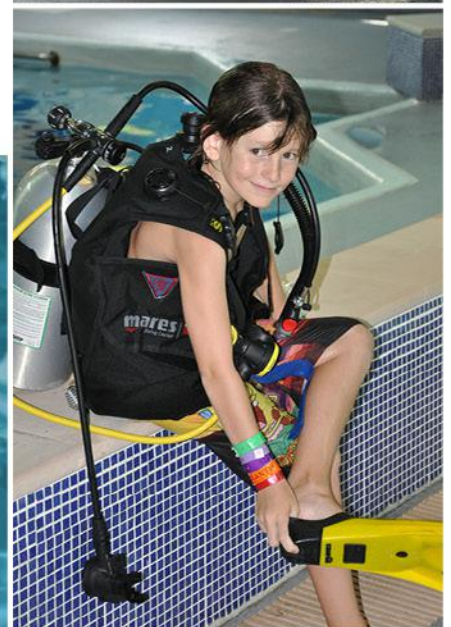
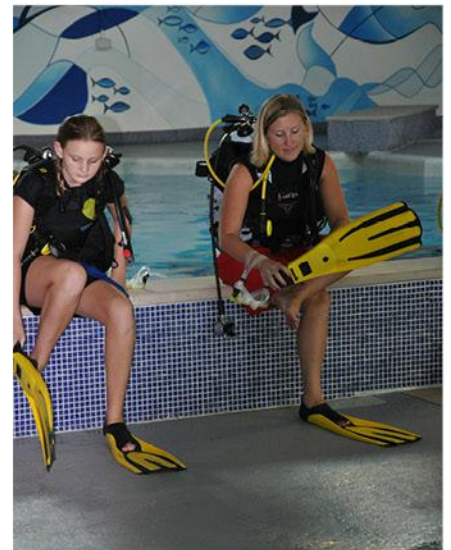
## OUR VERY OWN HOUSE REEF

For Mums and Dads struggling to think of kid-friendly activities this summer, Atlantis Dive Centre has the answer. We're currently installing our own artificial house reef inside the Palm Crescent, and need your children's help to chart the rapidly increasing marine life.

Throughout the summer, our experienced dive team – complete with our in-house Marine Biologist – will be running volunteer dives to our house reef to record the variety of marine life and the coral growth. Eagle rays and turtles are already regular visitors so a fun and educational dive is assured.

If your child is a certified diver, bring him or her along to enjoy the beach access dive site with a maximum depth of just 12m – we'll supply all the kit. And if they're not certified, we can soon change that with our Bubblemakers sessions for kids aged 8-10 and Discover Scuba programmes for children aged 10 and above.

As a recently-certified National Geographic Centre, Atlantis Dive Centre will also be running Nat Geo courses on the house reef. At the end of the course each child will be a 'Nat Geo Diver' and will have presented their findings to Atlantis Dive Centre, Atlantis Resort Management, Nakheel Department Heads, and of course, Emirates Diving Association (EDA). To find out more please call Atlantis Dive Centre on **04 426 3000**.



## LOCATION

Follow the main road on the Palm to the Crescent and signs to Atlantis. Turn right as you exit the tunnel and follow the Crescent road along the waterfront past Atlantis Hotel. Go right at the 3<sup>rd</sup> Round About and the Atlantis Dive Centre is located on the right hand side of the car park directly behind the security building.

Contact Info: 04 426 3000  
[www.atlantisdivecentre.com](http://www.atlantisdivecentre.com)  
[reception@atlantisdivecentre.com](mailto:reception@atlantisdivecentre.com)



## FOLLOWING FEATURES BY AL BOOM DIVING INTERVIEW WITH AQUA LUNG



Manuel Cabrere

Aqua Lung introduced the world to scuba diving more than 60 years ago and is the worldwide leader in scuba diving equipment. We chatted to Manuel Cabrere, the Communications and Marketing Manager for Europe, Middle East and Africa at the recent DMEX to find out what's new and happening in the realm of Aqua Lung.

**You are here for the Dubai International Boat Show and DMEX, and attend each year. What is your impression of the show, and of the UAE's diving market?**

The show is an impressive exhibition for the diving market. Our distributor

Al Boom Diving is doing better and better every year. It is important for Aqua Lung to participate to all of the dive shows in EMEA through our distributors. We try to support Al Boom Diving in the UAE as it is an important market for diving.

During the show we met a lot of people! We have the feeling that every year we see some new faces, maybe because the market is expanding. We are pleased to see that the pool demos were working well. It is important to show the visitors how simple diving actually is!

### The big question: what's new from Aqua Lung in 2010?

We have some new products in all the product families. For 2010 we focused on 2 main segments: one is the mid range products and the other is for the dive centres. We also introduced a new concept for travellers.

Two new regulators are introduced in 2010: Titan and Calypso  
Two new BCD'S: Pro LT and Zuma (which is getting a lot of attention!)

Three new ranges of wetsuits: Safaga, Mahe and Bali

### Aqua Lung is one of the brands that do offer a range for the ladies. Can you tell us about the dive gear tailor made for our lady divers?

We try to do our best for the ladies. In our modern countries, the women take an interest in the location for the family vacation. If the ladies find a good dive spot for the family location, and have some good dive kit, they are likely to persuade the family to have a dive vacation. About 38% of our Aqua Lung France staff are ladies and a lot of them are divers, so we know about their needs. They do ask us for dedicated products like wetsuits, BCD's and regulators. Some are even instructors.

We do not play only with colours. Ladies have some specific needs: Cuts of the suits, size of the skirt for the masks, mouthpiece for small jaws...and everything has to be light and trendy.

### Dive travel is popular in the UAE, but taking a heavy dive kit bag is not – what do you suggest for our travelling divers?

We have introduced a new concept: the travel pack. This is a specific set with a cabin bag into which you can place all of the equipment! Why rent when you can travel light?

A regulator, a wetsuit, a BCD, a pair of fins, a mask, an octo, an HP gauge and the bag is about 9 KG!

### Did you or your colleagues manage to dive in the UAE, and where did you go?

My colleague had some great dives in Musandam, but unfortunately I ran out of time – I will just have to come back next year!

## DUBAI AQUARIUM SPECIALITY COURSE

Can't get enough of the shark dives in the Dubai Aquarium & Underwater Zoo? We have the answer!

PADI has approved the Dubai Aquarium Distinctive Specialty that can be done in the Dubai Aquarium. The course can be counted toward your PADI Master Scuba Diver rating. Three exciting dives in the Dubai Aquarium, in the Dubai Mall, make up this course.

In dive 1, divers will complete the shark dive in the Dubai Aquarium. Divers are briefed on how to dive with the marine animals, what conditions and considerations need to be thought of while diving in an aquarium environment, and on the huge variety of species that you can expect to see in the Dubai Aquarium.

Dive 2 takes the experience one step further; with an underwater photo dive in the aquarium. After a briefing on how to take the best pictures underwater, divers will have a one-off chance to take photos in the Dubai Aquarium. Divers will then be shown how to use these pictures in identifying a specific animal in the aquarium. Photos can also be submitted to the Shark Watch Arabia conservation and database – which you will be shown to do.

If your pictures turn out well, why not submit them to the Dubai Aquarium Wall of Fame, where the best pictures are put on display and one is picked to be the image of the Dubai Aquarium certificate.

In dive 3, divers will experience the thrill of diving in the shark cage while the aquarium aquarists carry out the shark feed! Underwater photos of this experience can also be taken. What a unique opportunity!

All equipment is provided for divers at the Dubai Aquarium. The price of the Dubai Aquarium Specialty, including three dives and your PADI certification card, is Dhs 1,825. Divers that have already done a dive in the Dubai Aquarium need only complete dive 2 and 3 at a cost of Dhs 1,025. Lastly, divers that did the old Dubai Aquarium Specialty can upgrade for Dhs 625, and complete 2 dives.

By completing the Dubai Aquarium Specialty, you are eligible to apply for the Dubai Aquarium's new Volunteer Programme. In this programme you can volunteer to assist the aquarium with day to day diving activities. More information is given to those who complete the course.

For more information and bookings, contact Al Boom Diving on [abdiving@emirates.net.ae](mailto:abdiving@emirates.net.ae) or call 04-342-2993.

## Discover Scuba Diving Queue Jumper: 1,025 Dhs

The pool session is done at the Aquarium, in the cage followed by the dive at 3pm

## Updated Dubai Aquarium Specialty: 1,875 Dhs

Three dives:

- 1) Normal shark dive
- 2) UW photography session, divers may bring their uw cameras
- 3) Dive in the shark cage during the shark feed at 4pm anyday

**Special offers:**

**Specialty Upgrade 650 Dhs**

For divers that have done the old Dubai Aquarium Specialty, pay only 650 Dhs to upgrade to the new Spec (2 dives; dive 2 and 3)

**Shark Diver to Specialty Upgrade: 1,050 Dhs**

For divers that have done the Shark Dive and wish to do the Specialty, pay only 1,050 Dhs upgrade to the new Spec (2 dives; dive 2 and 3)



# EVERY DAY IS EARTH DAY AT LE MÉRIDIEN AL AQAH

## PRESS RELEASE

22 April, 2010



Energy-conserving resort and Al Boom Diving conducts an on-shore and off-shore clean up to mark the 40<sup>th</sup> anniversary of Earth Day

**Fujairah, UAE** – Earth day enthusiasts made a splash today at Le Méridien Al Aqah, marking the event with a clean-up of local dive sites off the East Coast, along with environmental initiatives throughout the resort.

Le Méridien Al Aqah continued its partnership with Al Boom Diving to conduct a comprehensive clean up off the coast – about 40 divers, including a team from the resort, scoured the East Coast's dive sites, removing rubbish which threatens the marine life and pristine coastline. A second team from the resort conducted an on-shore clean up.

"Our Earth Day activities are part of our ongoing commitment to protecting the environment and encouraging social responsibility, which we believe starts at the micro level with our in-house environmental committee and involves working closely with Dibba Municipality," said Patrick Antaki, General Manager, Le Méridien Al Aqah Beach Resort Fujairah.

Al Boom Diving, which has a branch at the hotel, conducts year-round clean ups and educates all divers about the importance of taking responsibility for the coastline.

"While Earth Day highlights important environmental programs all over the world, our aim is to prevent damage to the coast and diving areas, and to ensure the East Coast and UAE continue to offer recreational diving for all generations to enjoy," said Simon Tambling, managing partner, Al Boom Diving.

Earth Day, which has 20,000 partners and organizations in 190 countries, aims to promote a healthy, sustainable environment.

The resort has a year-round environmental program and showcased its initiatives during Earth Day. Activities included an energy-saving

campaign by the resort's green committee members giving tips to the resort associates on how to save energy and water; the launch of the Green House at the resort by Dibba Municipality Director Engineer Hassan Al Yamahi by the planting a tree; and the announcement of the formation of a Carbon Audit Team with an objective to further reduce energy consumption in each department.

Other environmental milestones for the resort include the reef ball project initiated in partnership with Al Boom Diving, participating in the annual Clean-Up Arabia Campaign with Emirates Diving Association (EDA) each year and supporting the move by His Highness Shaikh Hamad Bin Mohammad Al Sharqi, Member of the Supreme Council and Ruler of Fujairah, to declare Wadi Wurayah Fujairah the UAE's first protected mountain area.

### ABOUT LE MÉRIDIEN

Le Méridien brand, currently represented by approximately 120 properties in 52 countries, was acquired by Starwood Hotels & Resorts Worldwide in November 2005. With close to 70 percent of its properties located in Europe, Asia-Pacific, Africa and the Middle East, Le Méridien provides a strong international complement to Starwood's primarily North American holdings. Plans call for dynamic expansion of Le Méridien-branded hotels within the next five years, concentrating in the U.S., Latin America, and Asia-Pacific, including destinations such as India, Thailand and China.

For more information, please visit [www.lemeridien.com](http://www.lemeridien.com)

### ABOUT STARWOOD HOTELS & RESORTS WORLDWIDE INC.

Starwood Hotels & Resorts Worldwide, Inc. is one of the leading hotel and leisure companies in the world with 1,000 properties in nearly 100 countries and territories with 145,000 employees at its owned and managed properties. Starwood Hotels is a fully integrated owner, operator and franchisor of hotels, resorts and residences with the following internationally renowned brands: St. Regis®, The Luxury Collection®, W®, Westin®, Le Méridien®, Sheraton®, Four Points® by Sheraton, and the recently launched Aloft®, and Element<sup>SM</sup>. Starwood Hotels also owns Starwood Vacation Ownership, Inc., one of the premier developers and operators of high quality vacation interval ownership resorts.

For more information, please visit [www.starwoodhotels.com](http://www.starwoodhotels.com)

# DIVE INTO FREEDIVING

Have you ever wanted to try the freedom and excitement of freediving, but weren't sure how to get started? AIDA Freediving instructor, Sara-Lise Haith has teamed up with Al Boom Diving to offer AIDA Freediving courses.



"The demand for freediving education has grown tremendously in the last year, and I wanted to be able to offer the courses regularly, with the backing of a like-minded business. That's where Al Boom Diving came in to offer the regulatory requirements, insurances and not to mention great resort locations for the courses. Freediving is the next hottest thing in your diving log-book..." said Sara-Lise.

"Prominent events like the annual Fazza3 Freediving Championship have increased awareness of the sport, and I am happy to say that within a week, my first scheduled course was sold out immediately."

70 year old free diver Aharon Solomons famously quoted: "We have long ago surpassed the limits attainable by purely physical excellence and are now venturing into the terra incognita of our mental potential". Freediving is for everyone and anyone who enjoys being in the ocean and wants the freedom of no scuba tanks. It is a mental game, great exercise and a fantastic way of keeping fit and relaxing. It is a lifestyle second to none requiring just a mask, fins, and snorkel and the silent world of the colourful reefs are within reach of a few fin kicks, with no noisy bubbles...

The most popular and widely recognised training body for free diving at a recreational level is AIDA, which is the International Association for the Development of Apnea.



Apnea comes from the Greek word apnoea which means "without". It is simply the voluntary temporary cessation of breathing or breath holding, that gets longer with regular apnea training, a healthy lifestyle and moreover the ability to relax.

Training starts with the AIDA One-Star and Two-Star courses, working up to instructor level. The starting certification for divers who have never freedived and do not have much snorkeling experience is the AIDA One Star Course, which covers the basics of theory, and a pool or confined water session. It gives the student an experience of Pool and Open water Freediving and does not have any depth or time performance requirements. Students who are already comfortable in the water and have done some Freediving can start with the AIDA Two-Star course. The Two-Star course is a two to three day course (depending on diver ability and ocean conditions) and includes theory, pool work and open ocean freedives.

The AIDA two-star course will be run monthly at Al Boom Diving, under Sara-Lise's supervision and training. Theory and pool work can be done at the dive centre on Al Wasl Road, with the ocean dives done from Le Meridien Al Aqah Beach Resort in Fujairah, and in the near future from the dive centre at Jebel Ali Golf Resort and Spa. The all inclusive cost of the course is Dhs 2,430 (including materials, DAN insurance and the day trip to Al Aqah). The next available dates are 11<sup>th</sup> and 12<sup>th</sup> June or 2<sup>nd</sup> and 3<sup>rd</sup> July.

Email [abdiving@emirates.net.ae](mailto:abdiving@emirates.net.ae) for more information or to book your place.



## Al Boom Diving FREEDIVING COURSES

Al Boom Diving is excited to announce AIDA freediver training with Sara-Lise Haith.

The first course is scheduled, and spaces are limited!

The AIDA 2 star course will be held at Al Boom Diving Club on the following dates:

For June:

11 June – 08h30 to 17h00 (theory in the morning, pool training in the afternoon)

12 June – Open water dives from Al Aqah (Fujairah) 08h30 to 17h00.

For July:

02 July – 08h30 to 17h00 (theory in the morning, pool training in the afternoon)

03 July – Open water dives from Al Aqah (Fujairah) 08h30 to 17h00.

Price of course: AED 2,430

This is all inclusive (materials, DAN insurance; boat rides and cert card)

Instructor: Sara-Lise Haith

The AIDA \*\* freediver course is the foundation freediving course covering the necessary skills and knowledge for a non competitive recreational freediver to safely freedive with or without a guide line. It is designed to be a freediving beginners course for students who are already confident and happy in the water. The purpose of the course is to familiarise the student with the skills, knowledge, planning, organisation, safety procedures, techniques, problems, hazards and enjoyment of breath hold freediving. Students will be introduced to the basic disciplines of freediving; Static Apnea, Dynamic Apnea and Constant Weight freediving.

The course is NOT aiming toward competitive freediving and shall not include competition rules and regulations. The static and dynamic sessions are to be used to teach breathing, relaxation, finning and safety techniques. In the OW sessions the student will use the skills they have learned in the pool sessions and will combine these with the basic skills of OW freediving such as equalizing, duck diving, vertical swimming, body positioning.

Freediving equipment is required for best performance. This should include the following items:

- 1) Wetsuit with hood, neoprene socks and gloves (gloves are optional, hood is recommended)
- 2) Long freediving fins
- 3) Snorkel and low volume mask (Cressi SuperOcchio recommended)
- 4) Rubber weightbelt

If you do not have any Freediving equipment you can rent some from Sara or alternatively come in to view our selection from Cressi

To book your place, email [abdiving@emirates.net.ae](mailto:abdiving@emirates.net.ae) or call 04-342-2993.

## GET OUT THERE THIS SUMMER!

Tired of the Dubai brunch and spending the summer in an air-conditioned environment? Venture out to explore the underwater world this summer; meet new friends and have an adventure right here in the UAE.

### EXPLORE

The Musandam is located on the northern tip of the UAE, north of Fujairah and Ras Al Khaimah. This remote area is part of Oman where the Hajar Mountains descend into the ocean and the sloping sides are covered in reefs – and the diving is great! Al Boom Diving is now offering daily dives in the Musandam by speedboat. Dive trips go to Zone 1, where whale sharks are often seen in the Leema area; and further up to Zone 2 where a variety of dive sites wait to be explored.

Boat trips depart from the Golden Tulip Beach Resort in Dibba at 8:30am, and return after two dives at 2:30pm. Gourmet sub-sandwiches are available on board to keep the divers' energy levels up! At 2:30pm divers return to the Golden Tulip where they can enjoy the beach facilities, and 25% off on the food and beverages.

Al Boom Diving still run the Friday dhow trip as well for diving, snorkeling and sun-tanning, with an Arabic buffet served.

### WEEKEND GETAWAY

Diving also gives you an ideal excuse for a long weekend away. Al Boom Diving has special rates at its partner hotels for divers and rates in the summer; with special rates at Le Méridien Al Aqah, Golden Tulip Dibba and the Jebel Ali Golf Resort and Spa. Al Boom Divers also qualify for preferential rates on the food and beverages, because we know how hungry divers get!



## EXTENDING THE WEEKEND

Why not extend the weekend after a good weekend of diving? Stay over on a Saturday night at Le Méridien or Golden Tulip and relax on the beach with movies – with your new dive buddies. The drive back from Fujairah is probably easier than the Dubai to Abu Dhabi run!



**Al Boom Diving**  
DUBAI • FUJAIRAH • MUSANDAM • DUBAI AQUARIUM

### Summer Diving Deals

Valid: 11 May to 6 September 2010

Prices are all based on dives with tank and weight, and sharing accommodation, B&B. Prices will vary for single supplement and equipment rental. Subject to availability at the time of booking so book early!

**Musandam Package**

Enjoy two dives in the 'Norway of Arabia' in the Musandam, exploring Ras Marovi, Oakley Island, Pearl Island or Hard Rock Café, with your Oman dive permit and a gourmet sub sandwich included. Then stay over at the Golden Tulip Beach Resort in Dibba. You will need your passport, UAE national ID but no visa to enter Oman at Dibba. (50 Dhs extra per person to rent full dive kit).

**Zone 1 Dives: 525 Dhs per person**

**Zone 2 Dives: 600 Dhs per person**





**Al Boom Diving**  
DUBAI • FUJAIRAH • MUSANDAM • DUBAI AQUARIUM

### Summer Diving Deals

Valid: 11 May to 6 Sept 2010 from Saturday to Wednesday

Prices are all based on dives with tank and weight, and sharing accommodation, B&B. Prices will vary for single supplement and equipment rental. Subject to availability at the time of booking so book early!

**Al Aqah Package**

Enjoy two dives on the Al Aqah coast, exploring Dibba Rock, Martini Rock, Inchcape I or some new sites, with a gourmet sub sandwich between dives, and stay over at the five-star Le Meridien Al Aqah Beach Resort in Fujairah with breakfast and dinner for two 585 Dhs per person. Lunch is not included, but 25% discount is available for Al Boom Divers at the Goro Beach Bar.

**575 Dhs per person**

**Le Meridien Al Aqah with Musandam Diving**

Enjoy two dives in the 'Norway of Arabia' in the Musandam, exploring Ras Marovi, Oakley Island, Pearl Island or Hard Rock Café, with your Oman dive permit and a gourmet sub sandwich included. Then stay over at the five-star Le Meridien Al Aqah Beach Resort in Fujairah. You will need your passport, UAE national ID but no visa to enter Oman at Dibba. (50 Dhs extra per person to rent full dive kit).

**Zone 1 Dives: 625 Dhs per person**

**Zone 2 Dives: 700 Dhs per person**




we saw the whale shark 4 times as it moved around the rock feeding in the currents. After the dive everybody was talking and smiling as we recounted our own personal experiences and shared the photo's we had taken.

So far this year we have already had many sightings and we believe that there are as many as 3 whale sharks regularly feeding at Lima Rock. Many more divers will get to experience the thrill of diving with whale sharks.

## AN AMAZING EXPERIENCE

FEATURE **STEVE WOOD, PADI IDC STAFF INSTRUCTOR**

As a UK ex-pat living in the UAE, I have always thought myself very fortunate to be able to spend my weekends diving and teaching in warm, clear waters around the Emirates. The fish life is exceptional and you never know what you might see. In 3 years of living here I have seen dolphins in the Gulf and around the Musandam, manta rays, leopard and reef sharks, eagle rays, barracuda and hundreds of different reef fish.

But one animal alone really stands out for both me and the many students and pleasure divers I have dived with over the years...the Whale Shark.

Throughout the summer months we are fortunate to have regular sightings and interactions with whale sharks along the East coast of the Musandam peninsula and down past Dibba Rock in Fujairah. Once the first sighting of the season has been reported then the speedboats fill up quickly as everybody rushes to get a glimpse of the largest fish in the sea. It is hard to describe the excitement that a sighting of one of these beautiful creatures generates amongst a group of divers. You can hear the shouting through regulators as it approaches, and excited screams and the frantic point of cameras.

For many divers, the Whale Shark is in their top 5 'must see' animals. Spending time in the water with an animal so graceful and beautiful is an experience that many divers will never forget. One of my students told me it was his ultimate ambition to dive with a whale shark. When we met with one at Lima Rock in July 2009, he was able to fulfill that ambition. We dropped in on the south side of the rock and headed east going no deeper than 12 metres. Within minutes we had our first sighting as the 6 metre fish came by above us. We hung in the blue water and it circled round us for nearly 15 minutes before moving on. The dive lasted one hour and during that time



## OUR RESPONSIBILITY

As divers we all have the responsibility of looking after the environment and the creatures that share it with us. Whale Sharks can grow as large as 12 metres and are found in tropical and warm temperate seas worldwide. As filter feeders the Whale Shark pose no threat to humans, they will move slowly on or just below the surface, mouths open, drinking in the sea water containing the plankton and small organisms they eat.

Sadly it is humans that pose the greatest threat to these gentle beasts. Damage from boat propellers can often be seen on the back of animals. Additionally, their fins are highly priced in the shark finning industry, and they can be caught in fishing nets as by-catch.

If you are diving or snorkeling with a whale shark then please do not chase it, grab it by the fins or tail, and don't try to hitch a ride. Just stay back and enjoy watching it as it glides by. Some of my best photographs have been taken simply by hanging in the water and letting the whale shark circle around and past me.

One way you can help us to learn more about the Whale Shark is to upload your photographs to the International Whale Shark project.

Details can be found at [www.projectaware.org](http://www.projectaware.org) and [www.whaleshark.org](http://www.whaleshark.org).

The websites contain lots of information along with full details of what part of the shark to photograph and how to report it.

Steve Wood is an Independent Instructor working alongside Al Boom Diving. [www.scubasteve.ae](http://www.scubasteve.ae); [www.alboomdiving.com](http://www.alboomdiving.com)



# CITES REJECTS TRADE CONTROLS FOR OVERHARVESTED CORALS

PHOTOGRAPHY **MARINE PHOTOBANK**

## PRESS RELEASE

**Doha, Qatar** – Governments participating in the United Nations' species trade convention voted today against implementing better protections for red and pink coral, which are being overharvested to supply the international jewelry trade.

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) governments voted against a joint United States and European Union proposal to list all species in the family Corallidae in Appendix II of the Convention.

An Appendix II listing would have required countries to introduce measures to ensure international trade in these corals is sustainable and regulated.

"TRAFFIC and WWF are deeply disappointed with the decision not to list red and pink corals," said Ernie Cooper of TRAFFIC Canada.

"Without the trade control measures this would have introduced, the current overharvesting of these precious corals will continue unabated."

There are more than 30 species of Corallidae found worldwide, which are harvested in the Mediterranean and the Western Pacific, primarily for the manufacture of jewelry and other objets d'art.

Major harvesting and processing territories include Italy, Japan and Taiwan. The USA is the largest market for red and pink corals.

Many species are known to be threatened through overharvesting. According to TRAFFIC and WWF there is a clear case that regulation of trade in Corallidae under CITES would provide important safeguards in support of better management of these valuable coral species.

"This is a shame for CITES governments because it was an opportunity to show that the Convention has not entirely lost the capacity to face down vested interests that oppose CITES protection for marine species," said Dr Colman O'Criodain, Wildlife Trade Policy Analyst at WWF International.

China has already listed four of the threatened coral species found in its waters in Appendix III of the Convention. Such a listing requires that trade must be conducted only with the appropriate paperwork, allows countries to track and assess levels of international trade.



**CORAL JEWELLERY**

Photo by Andrew3000, 2007/Marine Photobank

However, several countries considered the identification of corals a serious stumbling block for implementing trade regulations.

"Bringing up coral identification was just a smokescreen to confuse the issue," said Cooper, who is soon to complete a guide to allow identification of corals, and has recently published a method for using DNA to identify manufactured coral products.

"Today's decision was a question of expediency rather than a full examination of the facts. Commercial lobbying won through," said Cooper, adding, "The conservation of corals is all at sea."

Between 30 and 50 metric tonnes of red and pink corals are harvested annually to meet consumer demand for jewelry and decorative items. The United States alone imported 28 million pieces of red and pink coral between 2001 and 2008.

Corallium populations off parts of the Italian, French and Spanish coasts are no longer commercially viable, while in the Western Pacific they have been depleted within five years of their discovery and harvest is shifting to newly discovered populations.

Corallium populations have diminished dramatically in size; in the Mediterranean, colonies of *Corallium rubrum* of up to 50cm in height were once common and now more than 90 percent of colonies in fished areas are only 3 to 5cm tall, and less than half are sexually mature.



**CORALS**

Souvenirs sold openly in tourist shops in the capital Male' of Maldives. Photo by Verena Wiesbauer/Marine Photobank.

## More Information

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## ABOUT WWF

WWF is one of the world's largest and most respected independent conservation organizations, with almost 5 million supporters and a global network active in over 100 countries. WWF's mission is to stop the degradation of the earth's natural environment and to build a future in which humans live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption.

[www.panda.org/cites/media](http://www.panda.org/cites/media) for latest news and media resources about the CITES meeting, or follow us on **Twitter @wwf\_media**.

## ABOUT TRAFFIC

TRAFFIC, the wildlife trade monitoring network, works to ensure that trade in wild plants and animals is not a threat to the conservation of nature. TRAFFIC is a joint programme of IUCN and WWF. [www.traffic.org](http://www.traffic.org)



# WHERE ARE CORALS FOUND?

FEATURE NOAA'S CORAL REEF CONSERVATION PHOTOGRAPHY MARINE PHOTOBANK



Tourists swim above corals in the lagoons of French Polynesia.  
Photo by Gerick Bergsma 2008/Marine Photobank

Corals are found throughout the oceans, from deep, cold waters to shallow, tropical waters.

## CORAL REEFS

Based on current estimates, shallow water coral reefs occupy approximately 284,300 square kilometers (110,000 square miles) of the sea floor.<sup>[a]</sup> If all of the world's shallow water coral reefs were placed side-by-side, they would occupy an area a bit larger than the state of Texas. This area represents less than 0.015 percent of the ocean. Yet coral reefs harbour more than one quarter of the ocean's biodiversity. No other ecosystem occupies such a limited area with more life forms. For this reason, reefs are often compared to rainforests, which are the only other ecosystem that can boast anywhere near the amount of biodiversity found on a reef. Coral reefs are sometimes called rainforests of the seas.<sup>[b]</sup>

Shallow coral reefs grow best in warm water (70-85°F or 21-29°C). It is possible for soft corals to grow in places with warmer or colder water, but growth rates in these types of conditions are very slow. Reef-building corals prefer clear and shallow water, where lots of sunlight filters through to their symbiotic algae. It is possible to find coral reefs at depths exceeding 91m (300 ft), but reef-building corals generally grow best at depths shallower than 70m (230 ft). The most prolific reefs occupy depths of 18-27m (60-90 ft), though many of these shallow reefs have been degraded. However, mesophotic coral ecosystems, where the dominant habitat-forming species can be comprised of coral, sponge, and algae species, are found at depths between 30 and 150m in tropical and subtropical waters. Corals also need salt water to survive (between 32 to 42 parts per thousand), so they also grow poorly near river openings with fresh water runoff.<sup>[c]</sup> Other factors influencing coral distribution are availability of hard-bottom substrate, the availability of food such as plankton, and the presence of species that help control macroalgae, like urchins and herbivorous fish.

ReefBase, a global information system for coral reefs, maintains a series of ReefGIS maps that show the location of coral reefs around the world.

## DEEP-SEA CORAL

Deep-sea coral communities thrive on continental shelves and slopes around the world, sometimes thousands of meters below the ocean surface. Unlike the well-studied tropical coral reefs, these corals inhabit deeper waters on continental shelves, slopes, canyons, and seamounts in waters ranging from 50m to over 3,000m in depth. A few species also extend into shallower, cold waters in the northern latitudes.<sup>[d]</sup> Deep-sea corals are found in all oceans, including the Subantarctic.<sup>[e]</sup> Like their shallow-dwelling relatives, deep-sea corals exhibit high biodiversity.

Deep-sea coral habitats appear to be much more extensive and important than previously known. Currently, it is impossible to ascertain the overall extent of deep coral communities because so many of the deeper areas these communities inhabit have been explored incompletely or have

Tabular *Acropora* corals  
Photo by © Konstantin Tkachenko/Marine Photobank



Close-up of deep-sea coral species *Keratoisis flexibilis*.  
Photo by Brooke et al., NOAA OE 2005/Marine Photobank

not been explored at all. With recent advances in deep-sea technology, scientists are beginning to locate and map the distribution of deep-sea coral habitat.

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# EAD AND TOKYO UNIVERSITY PARTNER TO RESTORE ABU DHABI'S CORAL REEFS

FEATURE AND PHOTOGRAPHY ENVIRONMENT AGENCY – ABU DHABI

### PRESS RELEASE

April 10, 2010

The Environment Agency – Abu Dhabi (EAD) has launched a Coral Reef Restoration Programme in coordination with Tokyo University of Marine Science and Technology (TUMSAT) and Japan Oil Development Company, Ltd. (JODCO).

This pilot project is part of a programme to study the feasibility of coral restoration in Abu Dhabi. The initial stage of this project will be to evaluate the state of corals and the applicability of the technology to Abu Dhabi reefs. If successful, the programme will provide opportunities for coral reef restoration.

Coral reefs of Abu Dhabi survive in one of the most stressful conditions of any reefs in the world. This is due to extreme seasonal temperature variations as well as very high salinities experienced in the Arabian Gulf. Despite these stressful conditions, coral reefs are able to thrive and provide important habitat for a variety of marine wildlife.

Coral reefs play a vital role in marine ecosystems such as providing habitats for various fish and marine species, protecting coastlines from storms and providing areas for recreational activities. Thus, ensuring the continued survival of coral reefs is of critical importance.

Human activities as well as natural phenomenon are known to cause coral reef degradation. Activities such as dredging, reclamation and anchoring cause harm to coral reefs. Rising sea surface temperatures linked to global climate change are also known to cause bleaching and death to corals.

Coral Settlement Devices, developed by Dr. Mineo Okamoto of TUMSAT, have been installed in sites off the Island of Saadiyat and Al Dhabeiyah in Abu Dhabi. This technology has been successfully applied to rehabilitate corals in various parts of Japan including one in Sekisei Lagoon, the largest coral reef in Okinawa Prefecture – Japan.

Through this partnership, EAD hopes to gain a better understanding of coral reef reproduction in Abu Dhabi and explore new technologies for the rehabilitation of damaged reefs and ensure the continued survival of critical marine ecosystems. Some EAD employees will be visiting Japan on a transfer technology programme as part of this project.

### ABOUT ENVIRONMENT AGENCY – ABU DHABI (EAD)

The Environment Agency – Abu Dhabi (EAD) is a governmental agency that was established in 1996. We are committed to protecting and managing biodiversity, providing a clean environment and promoting Sustainable Development in the Emirate of Abu Dhabi. We provide a direction for Government, business and the community to build environmental considerations into the way they plan and live without compromising Abu Dhabi development. Since 2008, EAD has been awarded ISO 9001 for Quality; ISO 14001 for Environment and ISO 18001 for Health and Safety.

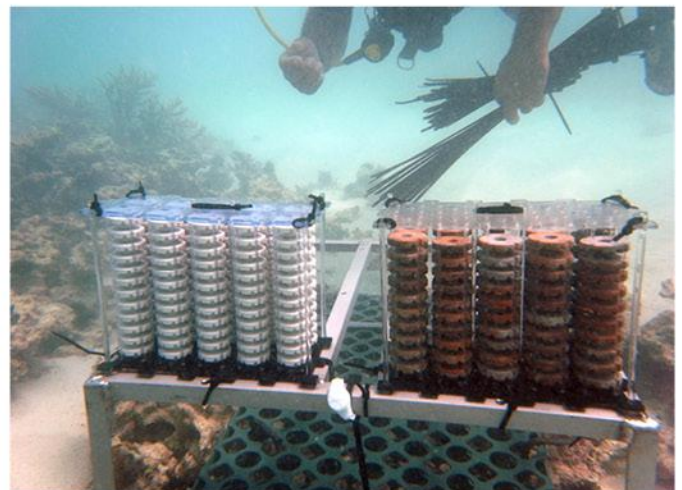
### TOKYO UNIVERSITY OF MARINE SCIENCE AND TECHNOLOGY (TUMSAT)

Tokyo University of Marine Science and Technology was established by merging Tokyo University of Mercantile Marine and Tokyo University of Fisheries in 2003. It plays a significant role in maritime education within Japan, since both pioneering predecessor universities specialized in related fields based upon traditions of over one hundred years.

For Further Information, Please Contact:



One of the EAD National Staff members installing a marine block



Coral settlement device installed in Saadiyat

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هيئة البيئة - أبوظبي  
Environment Agency - ABU DHABI



# OIL TOXICITY TO CORALS

FEATURE NOAA PHOTOGRAPHY MARINE PHOTOBANK



**ATTEMPTS TO CONTROL DEEPWATER HORIZON FIRE**

Photo by U.S. Coast Guard/Marine Photobank.

## COAST GUARD TRAINS FOR CONTROLLED BURNS OF DEEPWATER HORIZON OIL SPILL

Two fishing vessels drag an oil boom after trapped oil is set ablaze in the Gulf of Mexico. The U.S. Coast Guard working in partnership with BP PLC, local residents, and other federal agencies are conducting controlled burns to aid in preventing the spread of oil following the April 20 explosion on Mobile Offshore Drilling Unit Deepwater Horizon.

Photo by U.S. Navy, Jeffery Tilghman Williams/Marine Photobank.

From NOAA – Office of Response and Restoration in “Oil Spills in Coral Reefs: Planning and Response Considerations”.

### KEY POINTS

- Spill impacts vary in severity with the specific conditions at a given spill, including oil type and quantity, species composition, and the nature of oil exposure.
- Oil can kill corals, depending on species and exposure.
- Longer exposure to lower levels of oil may kill corals as well as shorter exposure to higher concentrations.
- Chronic oil toxicity impedes coral reproduction, growth, behaviour, and development.
- The time of year when a spill happens is critical, since coral reproduction and early life stages are particularly sensitive to oil.
- Branching corals are more sensitive to oil impacts than are massive or plate-like corals.
- Laboratory toxicity studies should mimic actual spill conditions to the extent possible.

### INTRODUCTION

Evaluation of oil toxicity is not an easy task, since each spill presents a unique set of physical, chemical, and biological conditions. The term “oil” includes substances that are chemically very different, ranging from highly toxic and volatile refined products, to less acutely toxic but long-lived, heavier fuel oils. Different species and life stages within a species have varying sensitivities and thus may respond very differently to oil exposure.

### EXPOSURE PATHWAYS

How corals are exposed to oil bears directly on how serious the impact will be. There are three primary modes of exposure for coral reefs in oil spills. In some areas (especially the Indo-Pacific), direct contact is possible when surface oil is deposited on intertidal corals. Presuming that some portion of spilled oil will enter the water column either as a dissolved fraction or suspended in small aggregations, this potential pathway must be considered in most cases. Subsurface oil is a possibility in some spills, particularly if the spilled product is heavy, with a density approaching or exceeding that of seawater; and if conditions permit oil to mix with sediment material to further increase density.

Evaluation of risk based on exposure pathway is a complex calculus that is highly spill dependent. Relevant questions that feed into the determination are linked to the considerations above and include:

- Are corals in the affected area intertidal?
- Does this spilled oil have a component of lighter, more water-soluble material?
- Will sea conditions mix oil on the surface into the water column?
- Is there a heavier component to the oil that raises the possibility of a density increase through weathering and association with sediment that could take the oil to the bottom?

Areas with intertidal corals could be considered at greatest risk in a spill because of the increased potential for direct contact with a relatively fresh oil slick. Regardless of differences in susceptibility by species or physical form, direct oil contact is most likely to result in acute impact because in this kind of exposure scenario the oil is fresher; with a greater proportion of lighter aromatic hydrocarbons, and the slicks are relatively heavy aggregations of spilled oil. The absolute levels of exposure would be expected to be



much lower than those encountered by direct contact with intertidal slicks, since only a small fraction of the total oil can be placed into the water column either in solution or physically suspended. However, the components of the oil mix most likely to enter the water column are those generally considered to be most acutely toxic. Corals may therefore be exposed to "clouds" of naturally dispersed oil driven into the water column under turbulent conditions, with impacts dependent on exposure concentrations and length of exposure.

## HEAVY FUEL OIL EXPOSURE

Heavier fuel oils contain fewer of the light fractions identified with acute toxicity than do refined and crude oils (although these bunker type oils are sometimes "cut" with lighter materials to facilitate loading and transfer). If they remain on the water surface, spills of heavier fuel oils are less of a concern from a reef perspective, but more of a concern for protection of other habitats like mangrove forests where they can strand and persist for long periods of time. However, the heavy oils can also weather or mix with sediment material and increase in density to the point where they may actually sink, which provides a direct route of exposure to subtidal corals. Although acute toxicity characteristics of heavy fuel oils may be lower, the potential for significant physical effects from smothering is greatly increased.

## ACUTE EFFECTS

A review of laboratory and field studies on acute effects of oil to corals can be confusing, since different studies appear to show contradictory results. Widespread coral mortalities following actual spills have been reported only infrequently, even when associated reef-dwelling organisms have perished. It may be that acute toxicity is not the best indicator of oil impact, and that adverse effects to the coral would be manifested over the longer term.

Oil exposure can kill coral, however, on varying time frames. Early studies of acute oil toxicity to coral used severe exposure conditions, such as directly coating coral with oil or submerging coral in marine diesel for 30 minutes. It is surprising that any of the test corals survived at all. Sometimes, a colony was not killed outright after a "dunking" in pure product, but later showed a steady decline in condition over a long period (>100 days) before dying.

A recent study by Harrison, using methods more comparable to spill conditions, found that low-level exposures almost completely disintegrated coral tissues after 48 hours. While they had selected a coral species known for its sensitivity to stress (*A. formosa*), these results suggest that longer exposure (4-48 hrs) to low concentrations of oil may be more toxic than shorter exposures at higher concentrations.

Differences in tolerance by coral species may be an important consideration but physical form may be more significant. Branching corals appear to be among the most susceptible whereas massive corals are more tolerant of oil exposure in laboratory studies.

The old notion that coral reefs do not suffer acute toxicity effects from oil floating over them is probably incorrect. Certainly, direct coating increases the severity of impact, but oil concentrations attainable during a spill may also kill some species.

## CHRONIC EFFECTS

Chronic effects of oil exposure have been consistently noted in corals and, ultimately, can kill the entire colony. Chronic impacts include histological, biochemical, behavioural, reproductive, and developmental effects. Field studies of chronically polluted areas and manipulative studies in which corals are artificially exposed to oil show that some coral species tolerate oil better than other species. In contrast to acute toxicity studies, nearly all researchers studying chronic effects have documented sublethal changes in exposed corals. Advances in technology now allow the detection of effects at cellular and genetic levels.

Sublethal oil exposure affects many normal biological functions, including reproduction and recruitment, which may have the greatest potential to adversely impact coral survival. A host of studies show that oil reduces coral fertility, decreases reproductive success, and inhibits early life stage development. A spill occurring at just the wrong time in a given area, at the peak of reproductive activity, could cause immediate and long-lasting harm to the communities of corals themselves. For example, several species of the coral *Montastrea* in Florida spawn during August and September. This would be a time when these communities would be at greater risk for reproductive impacts.

Oil also impairs two fundamental bioenergetic components for the entire coral reef community: primary production by the zooxanthellae symbionts in coral, and energy transfer via coral mucus. While some studies indicate that these effects are transient and that corals can recover from them in the absence of oil, circumstances of individual spills will dictate whether these would be of concern to responders and resource managers.

## BIOACCUMULATION

Oil quickly and readily bioaccumulates in coral tissues and is slow to depurate. This may be linked to the high lipid content of the tissues. Uptake into the symbiotic zooxanthellae also occurs. Researchers have found that petroleum hydrocarbons are deposited into the calcareous exoskeleton of corals, which introduces the possibility of using coral

skeletons as historical records of hydrocarbon contamination in an area.

## ASSOCIATED REEF ORGANISMS

In addition to corals themselves, oil may also adversely affect the associated fish, invertebrates, and plants in the coral reef community. Turtles and marine mammals may be seasonal inhabitants of the reef, and may be susceptible to direct oil exposure since they must surface regularly to breathe. Broad generalizations on oil toxicity are not very helpful for such a diverse group of species, life histories, and life stages. Though the scientific literature on oil toxicity to coral reef fish is limited, one can assume that they would show similar ranges in sensitivity to oil as would fish from temperate areas. Likewise, toxicity information on invertebrate groups could be generally inferred from data collected on related organisms from other habitats.

Fish in open waters are thought to be able to avoid oil, although fish kills have been documented at several spills in shallow coral reef habitats. Since many coral reef fish have small home ranges and are residents of the reef, it follows that they would be at higher risk from oil exposure than non-resident, more widely ranging fish.

Some groups of invertebrates are known to be very sensitive to oil, including many crustaceans. As with coral reef fish, there are a number of documented incidents where invertebrates were killed after an oil spill. Some invertebrates, such as bivalves and snails, may not be acutely impacted by oil, but may accumulate oil components such as polynuclear aromatic hydrocarbons (PAH) in their tissues. Species sensitivity varies greatly. Generally, early life stages are more sensitive than adult organisms, though there are exceptions. Consulting local experts and the broader toxicity literature is in order to assess oil toxicity to specific organisms in the reef community.

Also of concern are concentrations of fish and invertebrate larvae, which often are found within the upper water column where they may come in contact with oil products. Marine larval organisms may be more susceptible to oil toxicity given their surface-to-volume ratio and limited ability to steer clear of a spill. Larvae and other plankton serve as major food sources for a variety of coral reef organisms (including corals themselves). Larvae thus may serve as a mechanism for ingestion of oil products by reef organisms that otherwise would not come in contact with surface spills.

To download the entire publication go to:  
[http://response.restoration.noaa.gov/  
book\\_shelf/70\\_coral\\_full\\_report.pdf](http://response.restoration.noaa.gov/book_shelf/70_coral_full_report.pdf)





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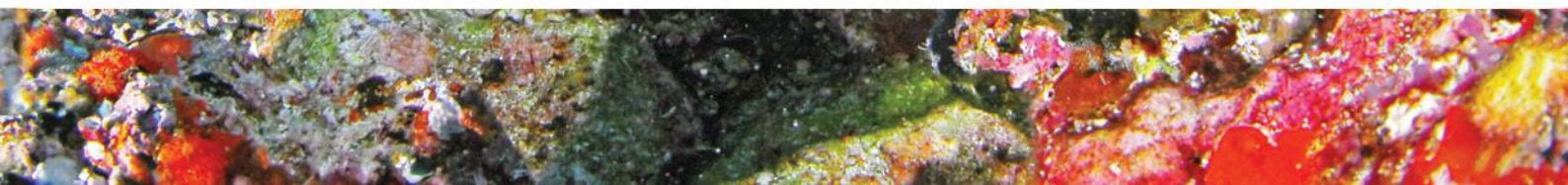
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PART 2 OF A SHARKQUEST ARABIA 3 PART SERIES OF ARTICLES BY JONATHAN ALI KHAN

# SUDAN'S SHARKS – VANISHING TREASURES OF THE RED SEA

FEATURE JONATHAN ALI KHAN PHOTOGRAPHY HUSSAIN AL QALLAF



Three grey reef sharks from the Sha'ab Rumi pack. Photo by James Lea.

It's steaming hot and humid and I'm sweating buckets nonstop. The swarming flies are not helping either! Sitting on the aft deck of Deli, anchored between heavily weathered live aboard boats at the end of their season in sweltering Port Sudan, I look at the smug Sudanese gentleman sitting in front of me and feel another brief moment of regret about my decision. It's dusty and everything around us looks derelict. We have just sailed more than 500 miles to Sudan from Djibouti in order to meet our first team of researchers and already things have gone horribly wrong!

Apparently, despite more than 6 weeks of lead in time our Sudanese agent will require a few more days to prepare our permits. Welcome to Sudan!

As Chico (our Sudanese agent) and I sit looking at each other over a cup of tea, the glint in his eye reveals his intent to fleece us alive as I ask how long it will take to get the permits. It appears that in order to get a filming permit sorted, we are now being asked to pay an additional fee to the Red Sea Governorate Ministry of Tourism & Environment! Whilst diving permits only cost us 150 Euros each, filming permits are supposed to be free in Sudan. But in our case, of course it

seems we represent rich pickings and our film permit will cost us a whacking 7000 Euros! Pay it or leave!

If we pay, Chico can have the permits ready by tomorrow! It was impossible to pay such an extortionate amount of money for what was obviously a blatant scam even if I wanted too. Sadly corruption still has to be factored into anything in Sudan. I told him that we would never be able to manage that amount, but would let him know the following day what we could manage.

And so began a spate of negotiations on the phone lasting 5 days! I even went ashore to meet the DG of the Ministry (apparently a dear friend of Chico's), but I obviously couldn't convince them to waive the fees despite offering them a diving promotional film and explaining all the positive reasons as to why Sudan was chosen to be the starting point of our conservation awareness project and documentary film; something that might eventually help to bring more divers to their shores and certainly win them some kudos in conservation circles. Unfortunately it all fell on deaf ears and the only thing that mattered was the money. It even had to be Euros, not US Dollars!



## THE SUDAN TEAM

From left to right top row; Majid Sarhaddy, Tom Stephens, Ali Zeid, Capt. Thibo, Vincente, JAK, Hussain Al Qallaf, Andy Willson and James Lea. Photo by Dareen Al Mojil.

As it turned out, we needed the time in port anyways! Other obstacles to overcome included water in the engine (requiring two days to repair) and a blown starter motor for the engine! We also needed to find a decent RIB in good working order to rent and hire a knowledgeable dive guide to help find the current best locations for sharks. All of which resulted in the kind of mayhem that might someday be something to laugh at.

As for Port Sudan, it is the most bizarre place where very little happens. During the day, the roads are almost deserted with only a few rickshaws and donkeys wheezing their way up and down. The occasional pimped up Toyota Corolla and dilapidated mini bus liven up the street in glorious bursts of Technicolor neon and booming hip-hop music. The faded buildings have grand eroded archways that occasionally house a barbershop pharmacy but most stand vacant. Everything is in disrepair from a more



decadent age now long gone. As one of the main port cities in the largest country in Africa I think we all expected a lot more.

At night, it's a slightly different story as the place comes alive, especially along the ambitiously named Corniche. The pimped up Corollas return to the main drag as people appeared to melt out of the surroundings by the hundreds forming friendly crowds clearly pleased to see each other. Coffee stalls and a nearby social club start pelting out Sudanese pop music in a competition to see who had the loudest speakers (right in front of our mooring of course) until the early morning hours; making it a tad difficult to get any sleep. On top of which, the moorings used by the dive boats was directly opposite the busy container jetty and we would often be woken up to the sight of a towering container ship looming a few meters over us as it maneuvered into position. As we waited for our researcher guests to arrive, we accepted that this was a place that thrived at night and slept for most of the working day and so we armed ourselves with shore passes, discovering the delights of Sudanese cuisine in a popular restaurant adjacent to an ice cream shop plying a roaring trade and spent many an hour in an internet café.

One by one, our researchers flew in to Port Sudan and joined us on the boat. The first was James Lea from the UK working on the Save Our Seas Foundation Red Sea Silky Shark Program in Jeddah. Next in were Dareen AlMojil and Hussain Al Qallaf, both from Kuwait. As a young Arab woman shark specialist working on her PhD, Dareen is very important to our project in that she stands for everything that we are trying to accomplish with Sharkquest Arabia. Hussain has come to help with the photography as the Director of the Kuwait Voluntary Work Centre. Last to arrive was marine biologist Andy Willson from Oman. Working for 5 Oceans, Andy is an experienced diver and researcher who has come to look for hammerheads. After two weeks, we would be joined by the Director of IFAW Germany Dr. Ralf Sonntag; a strong supporter of our project.

My Wild Planet team had traveled up with me from Djibouti, including stalwart Assistant Producer Tom Stephens, working as support diver and media manager of our daily rushes with Majid Sarhaddy, our topside cameraman and second underwater cameraman. I would be shooting most of the underwater footage and our little 3-man team has years of experience working together.

Our French skipper Capt. Thibeaux (Thibo) was alarmingly young looking, belying a lifetime of seafaring experience and brought in especially for this expedition by the Deli owners from the Seychelles (where he lives). His Acting First Mate (and part owner of our vessel) was Vincente, a swarthy long-haired Spaniard with a mischievous glint in his eye,



The M.Y. Deli anchored off Umm Mesharifa island as we searched in vain for Mantas.

who doubles as cook, mechanic and Dive Master – all of which he managed with the natural ease of a man who has spent his life at sea. The boat's Djiboutian seaman, Ali Zeid, was a chain smoking hard working fellow with a demeanor that proved hard to crack with a smile. One of those characters from which you need to earn enough respect before breaking through his reserve.

Our newly acquired dive guide/boat handler Ali is a charming good-natured Sudanese who proved to be a real find. Last to board the boat was the assigned security guard from Internal Security. A friendly guy called Mohammed who was supposed to check that we didn't film anything we were not supposed to and to make sure we didn't get into any trouble. Glued to his transistor radio unless sleeping, he was good at his job – we hardly noticed he was there!

I have been asked a number of times as to why we started the Sharkquest Arabia Initiative project in Sudan of all places? The answer is uncomplicated, but far from simplistic! Because they have sharks! And by today's measure, quite a lot of them!

In a world of seas that are rapidly losing 80 to 90% of many shark species, this is not an answer to be underestimated by any standards. Certainly not in the seas surrounding Arabia where sharks are under siege to a degree that threatens their continued existence. Despite being the first Arab nation to protect its sharks since the mid '90s, it is sad to report that even in Sudan, sharks can't escape the cutting edge of a cruel and indiscriminate shark fin trade fuelled by the still growing demand from the Far East. Yemeni fishermen travel hundreds of miles in small, barely seaworthy vessels to raid these remote reefs operating as shark pirates!

The Chinese demand for fins may perpetuate the ruin of our underwater world for the sake of a soup dish and a misrepresented belief that

shark cartilage can prevent the onset of cancer. Demand from other Western based industries also add to the disastrous scale of fisheries around the world mainly for shark liver oil and sharkskin. Whilst it is easy to place the blame on the demand, I think the real question we have to ask ourselves is what are we doing about it?

Make no mistake. This is one of the biggest commercial sell-outs that humanity has ever faced in terms of marine resources, eclipsing even the more popular whaling issues given that the consequences are the spiraling erosion of life in our seas.

Despite being in a time of growing awareness, during the recent Doha CITES convention in March, greed and ignorance once again joined allegiance in a result that brings shame on our generation of decision makers. Strong lobbies from China (for sharks) and Japan (for tuna) managed to buy, bully and cajole support from the poorer and less resilient nations in order to confuse, mislead and finally block the proposals to add 8 species of threatened sharks to Appendix II.

But sadly, despite this having been the single biggest effort to date to attempt to support shark conservation on such an international stage, we again witnessed the triumph of poor judgment, greed and ignorance over a chance to finally do something right. Shamefully, we failed the sharks and in so doing, we failed ourselves. Will we ever learn that unless we take a stand that truthfully delineates the nature of the threats facing our natural environment and the wildlife that we are now responsible to protect; then the world will always remain just a collection of marketable resources being sold off to the highest bidder by people who are poised to take advantage of loopholes.

Sadly it seems many of these issues are culturally motivated and therefore risk becoming racially prejudiced. But let's say it



Dareen Al Mojil and Tom Stephens descend the wall at Sanganeb Reef.





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as it is. The Chinese are now the root cause behind the demise of sharks, much as in the same way that the Japanese are now the root cause of the pressures on tuna and cetaceans. Throughout history there has been a long list of other cultural culprits dominating the cause and demand for pressures on nature's bounty and most of the blame for our planet's condition stems from the past.

Of course we can't change the past, but we now live in an era of enlightenment where news and information travels at the speed of light. So how can we still allow this to happen? The demand for shark fin is growing exponentially by 5% each year due to the growing affluence and strength of the Chinese economy. Racially delineated maybe, but my prejudice is more against the outdated beliefs used to justify the cause for the worldwide slaughter of sharks. I find it hard to condone the arrogance of a people that are commercially aggressive and successful enough to develop a powerful world economy, whilst simultaneously allowing their old world beliefs to drive a systematic assault on nature; using the mantles of culture and history in order to distort the truth in today's supposed enlightened era. This is a culture that is paying people in far off corners of the world to rape their natural resources for a soup dish. It is hard to watch this trade prosper; despite the lowering numbers of sharks just because it has the power of a multi billion-dollar trade supporting it.

My anger is mostly against how we allow this fishery to continue whilst the world really does know enough to have reason to stop it. Where is the ethics in this? Where is the justice? The truth is, we are all to blame. Human nature is to blame. Cultural differences are not something under which we can expect to hide wrongdoing. Those cultural differences are merely a shift in priorities of a human nature that spans all races and people of any race, creed and ethnicity should be held accountable for the consequences of their actions when perpetuated against the universal state of our planet.

Looking back at the brown smoggy smudge of Port Sudan on the receding horizon, the realization that we were finally about to have our first dive in Sudan's Red Sea brought our surroundings sharply into focus. Flying fish fanned out in all directions in escort to our progress. The sounds of creaking wood, the sharp metallic tapping of rigging and constant slush of our bow wave breaking through the sea's mirror-flat surface – suddenly lifted the anxiety that has been clouding my heart and mind for weeks. We are finally in the field and it was time to leave the heavy thoughts, weeks of planning and the bitter taste of extortion behind.

Our first dive was the Umbria – a world famous shipwreck just outside of Port Sudan and an ideal site for testing everyone's equipment

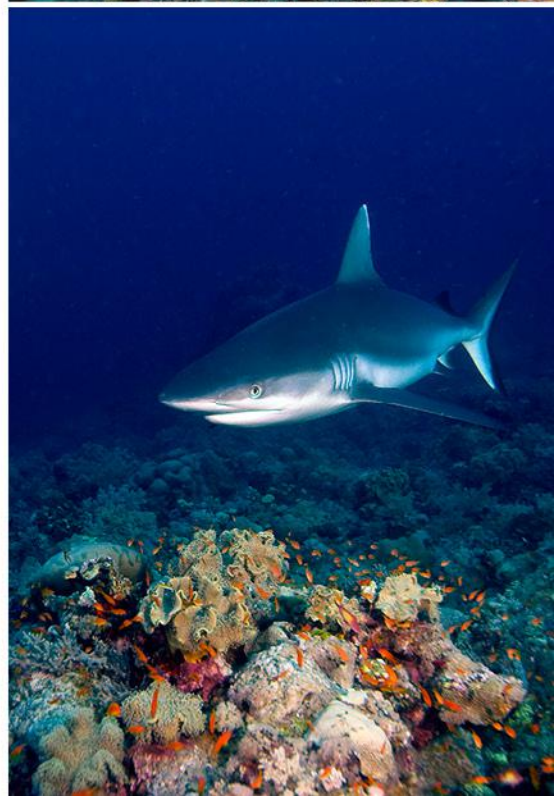
whilst discreetly ascertaining our teams dive proficiency. Immediately upon entering the water, it was clear to see that conditions were spot on according to the time of year. Visibility was not bad at 20 meters, but there was a lot of plankton life and the temperature was already on the rise. These are the telltale signs of the end of clear water and the beginning of the transition that causes coral spawning and ignites the reefs into a frenzy of energetic life. Exactly why we chose this month. The coral spawning creates a buzz on the reef and brings the sharks in close. But timing is critical. Rising temperature also means that the thermoclines will soon start to sink to depths beyond our SCUBA diving range, taking many of the larger shark species with them.

Descending down to the ammunition hold, it was eerie to feel the vulnerability of being exposed to thousands of exposed shells. As I filmed Hussain taking photographs with the utmost care, you just can't help thinking that if they ever went off, there was enough explosive power to wipe out Port Sudan and cause a monumental tidal wave. This is definitely one of the best wreck dives in the world and it would have been a crime not to dive it. But it was not why we were here, so I was keen to get it over with and move on to our first real study site. Sanganeb.

Only 3 hours sailing from Port Sudan, Sanganeb is an exciting protected dive site made famous by the promise of schooling hammerheads. We all moved to the foredeck to sit and watch as we approached the old lighthouse at the Southern point of the open sided atoll, each locked in our own thoughts. For all of us that had never dived here before, Sanganeb has long been part of the search for the holy grail of Red Sea diving. Being here felt truly momentous and as the crew set about fixing a line to the lighthouse jetty, we started to assemble our kit and I gave the first of many dive briefs.

This was it! We were officially about to start the Sharkquest Arabia project. This was to be an exploratory first dive as I needed to make up my mind as to whether we should stay here for a few days or move further north. We split into dive buddy pairs and lugged the cameras onto the RIB.

Ali dropped us in at the Western edge of the main reef wall with a gentle current tugging us to the East as we followed the slope down towards the first shelf at 20 meters. Hovering over a small brilliant white terraced expanse of sand, a massive school of barracuda welcomed us to Sanganeb as I filmed our way down. Blue water, swirling schools of barracuda and what appeared to be a pristine coral reef set the background. All around us we were surrounded by a staggering number of massive groupers laying claim to their little patch of territory and I counted over 30 groupers guarding their plots of reef eying us with suspicion.







JAK filming schooling barracuda at Sanganeb's more exposed northern dive site.



Part of the reef drop off on Abington Reef.



A fine specimen of grey reef shark that became a regular protagonist of our filming dives.



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By the time we approached the edge of the second slope the dynamics of the dive was already different. Plankton laden waves of currents were sweeping up from the abyssal depths and the slope turned rapidly into a drop off that ended on a seabed over 700 meters below. By the time I had reached 30 meters, I was battling the current concerned that I still hadn't found the thermocline. This thermocline was already down deep meaning that the hammerhead sharks, which for most part of their day stay well below the cold-water layer, might be already beyond our reach.

As I descended to 40 meters delayed by the chance to film a small white tip reef shark, I encountered James and Andy on their way up from below. Andy signaled he had seen hammerhead sharks, but only 2. Feeling encouraged I descended to 50 meters and finally entered the shimmering waters of the densest thermocline I had ever experienced. My plan was to stay only a few minutes at this depth, but it was immediately evident that there were no sharks in sight. Swimming away from the reef a bit to scan the grey water I was fighting the current and knew I was wasting my time. By this point both of my computers were letting me know it was time to get a move on. Ascending to initiate a sequence of safety stops I kept my eyes on the abyss. Even though I hadn't managed to see hammerheads myself, I had at least expected to see grey reef sharks that are common to many of these dive sites. Disappointed I started to ascend to shallower water.

Before reaching Sudan I had seen reports from other divers and film crews over the last few years. More recently I had been scanning the Internet for weeks reading researchers papers and diver's comments about their Sudan diving experiences. It seems that an emerging pattern is shaping to reveal that sharks are not as commonly seen as before even here in Sudan's protected waters. Although this was only the first dive, I already started to feel a shiver of anxiety that this trip might be a lot more difficult than I had anticipated.

Back on board the Deli, we sat around the breakfast table discussing our dive. It was obviously good to find the corals here were pristine and clouded with anthias and juveniles of countless species. Clearly the reef was as healthy as it could be and the scenery was stunning. Despite that, I just couldn't rid myself of the feeling that something wasn't quite right. James and Andy had descended straight down to 50m at the southernmost point. They had clocked up almost 13 minutes below the thermocline and in that time, seen just the 2 hammerheads and 2 white tip reef sharks. Dureen had also reached the thermocline but like me had not seen them either. None of the others had seen sharks either. The second dive had the same results, only this time no one saw a single shark.

We had chosen this time of year especially after receiving advice from dive operators and the IUCN researchers working the Red Sea Mega fauna project. There should be

sharks here. Now! During the third dive the water's conditions worsened considerably. Visibility was down to only 10 meters and the current was surging along the wall making it almost impossible to follow our previous dive plans. Despite 5 massive Napoleon wrasse and vibrant reef life, I made my decision to move on to Sha'ab Rumi after ending the dive without seeing any sharks.

Back on the M.Y. Deli, Capt. Thibo got us underway in order to reach one of the most famous dive sites in the world before the onset of night. After 2 hours we reached Sha'ab Rumi, the only true atoll in the entire Red Sea. Getting there was one thing. Getting to the anchorage inside the lagoon was another. The only way inside is through a very narrow passageway that Jacques Cousteau blasted in the reef wall back in 1960! Majid was hoisted up the mast to film our passage whilst Ali manned the RIB and led the way. Ali Zeid and Vincente issued hand signals to Thibo and we squeezed through the opening with only a few feet to spare on both sides. The narrow opening is literally a few meters away from the location of Cousteau's famous Conshelf habitat experiment and we could see some of the structures through the shallow clear water as we passed. Once inside, we found the mooring buoy and settled into our first wide-open sea sunset in Sudan whilst the crew tried to get Majid down after the pulleys got jammed! He was stuck up the mast for close to 2 hours before they managed to finally get him down.



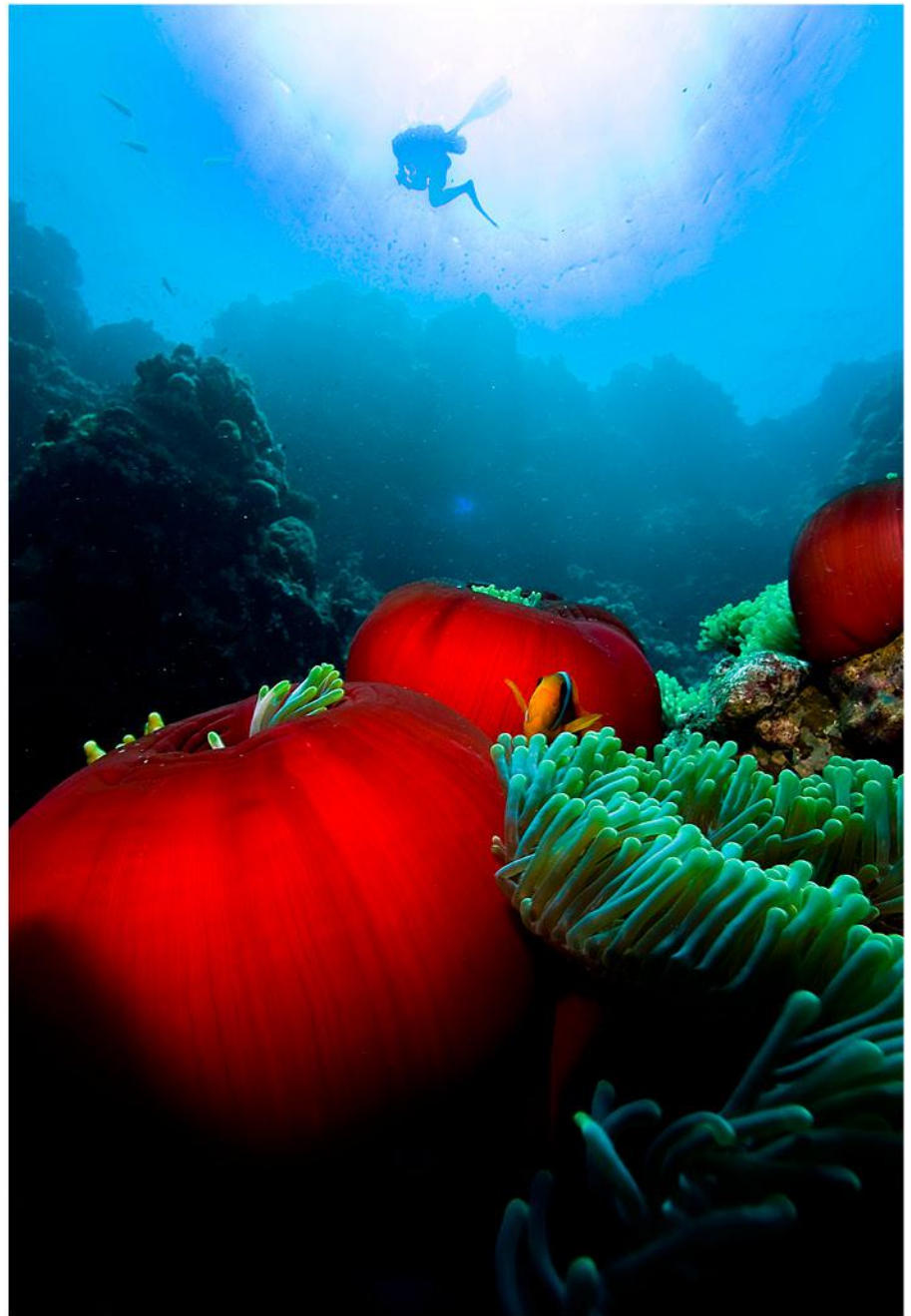


After a fabulous dinner and satellite phone call to my wife, I finally lay my head against a pillow whilst the strong breeze tugged at my bed-sheet. We had all opted to sleep on deck in a routine that we kept to throughout the trip. The constant lapping of the waves turned my thoughts into a sleepy slush with the last entry in my diary that day repeating itself in my head... "the stars are fierce tonight and the promise of adventure is helping to finally replace the anxiety of probable failure".

By 6.30AM the following morning, our RIB was positioned to drop us in on the Southern point. A large languid swell was tumbling against the reef and we gauged our timing in order to drop down on the knife's edge of the reef where the slope reaches a first terrace at 24m before falling off into deep water. Once again barracuda greeted us on the terrace. I managed to descend right on top of the first of two abandoned shark cages left by Cousteau's team 45 years before and it took me a while to recognize it for what it was. Simply touching it thrilled me to bits! This time, instead of white sand the plateau was covered in hard coral bommies and coral carpet blanketing most of the surface area clouded in thick dense schools of anthias and other small fish. Groupers were omnipresent and Bumphead Parrot fish formed muscular squadrons moving purposefully down the reef.

Swimming against a strong current laden with plankton surging up from depth, the sense of health and wellbeing this reef emanated was physical and filled every sensory perception of my body! Within the first minute of our dive it was clear to see why this is such an important reef and why it is considered one of the best dive sites in the world. Not only was it healthy and vibrant, it felt raw and totally wild.

The current threatened to sweep us away and so we tucked in behind the lee of coral bommies and outcrops. Looking out at the richness of this reef as plankton ripped by, I was startled as the first grey reef shark swam into view right next to us, materializing as if out of nowhere. A large female, she turned effortlessly against the current and swam towards me in order to satisfy her curiosity. I was so enjoying the moment that I forgot I was holding a camera and quickly recovered myself as she swam right over my head. She circled twice giving me a chance to catch some lovely shots before getting bored and swimming away. Tom was diving as my support diver but keeping his distance so as not to interfere with the camera angles. As I turned to check on him, two sharks appeared from behind catching him by surprise and again veered right towards me. This time they passed right in front of me only a meter or two away with their dorsal fins slanted in agnostic display. In the distance another shark was circling wide, followed one by one by at least 8 more and within a few minutes we had met the braver of this reef's resident grey reef sharks.



Over the following week we formed a daily routine with these fascinating animals, learning as much about them as we felt they were learning about us. Having devised a fixed drop line with a shark baiting station; which we positioned in different corners of the reef, we managed to film over 30 hours of shark footage and the research work of the scientists that week. Grey reef sharks are territorial and it was clear that they had a hierarchal system of dominance. The dominant female was pregnant and proved one of the most frequently sighted sharks. Each of this group of sharks had distinct behavioral traits that enabled us to distinguish one individual from another. It was also apparent that they possessed an inquisitiveness and intelligence as they appeared to be studying us finding us more of a curiosity than a threat.

James, Tom, Andy and Dareen handled the baiting. Each of the support divers was

equipped with a billy club for those just-in-case moments! Those moments only happened whenever the guys refreshed the bait and stirred up the fish heads in the bait boxes. The suddenness of how the sharks could change their demeanor was fascinating to observe, swimming rigidly and erratically in full diagnostic display. Within seconds they would swarm the box trying to force their way inside jostling and bumping each other in a frenzy forming a knot of shark sinew and serrated teeth.

For the most part we would film from a few feet away during those feeding frenzies. But as we were dealing with some pretty severe currents, on more than a few occasions I found myself in the middle of the action. On one such occasion I somehow ended up sitting on the bait box with sharks writhing around my legs. Although bumped a few times, it was as if they knew not to bite out of some tacit agreement. I have to say there is nothing more



exhilarating than being part of a shark frenzy and coming out unscathed. Whether we had possibly habituated the sharks to us or they clearly had enough intelligence to determine we were neither food nor an immediate territorial threat, these frenzies seemed to follow a pattern and we soon felt that we could control things to remain relatively safe. There was only one large male shark that seemed to eye us with suspicion for most of the week we were there. He would maintain his distance and watch as the more impulsive juveniles would dart in and out of our study area.

I think I can speak on behalf of us all when I say that when we left, we left with a sense of having connected with these sharks. We could sense their mood swings and their curiosity. There were even moments when we felt they were toying with us. On one occasion one of the juveniles swam right up to me and bumped my leg in order to 'taste' by smell what I was made of. Strangely and maybe stupidly, I didn't feel fearful of him as he did it.

We moved far North the following day in order to reach Umm Mesharifa for the start of the manta ray aggregation known to occur in the shallows between the reef structures. Unfortunately we were too early and failed to see a single manta despite spending two days searching in vain. Cutting our losses, we made way to Abington Reef and then on to Angarosh.

We had a lot of expectations from both dive sites given their reputation as ultimate shark dives by long range Egyptian Liveaboards. These steep sided pinnacles rise from extreme depths and feature two terraces and a series of smaller ridges within range of divers. We arrived here during a very large swell and conditions were dodgy; normal for these two highly exposed dive sites. With two teams diving twice on both sites, the result was a huge disappointment. Although amazingly healthy and wildly dramatic as far as dive sites go, we only sighted a single large female thresher shark and a couple of white tip reef sharks at depths of 40 to 45m. Hardly constituting a successful series of dives from our perspective, I asked Thibo to take us back to Sha'ab Rumi where we enjoyed more time with our grey reef friends and filmed interviews with Sudanese fishermen.

Dareen and Hussain managed to solicit some fascinating insights from these sea-hardened fellows. Working out of small wooden skiffs, sometimes nothing more than a dug-out canoe with a small lateen sail, many approached us for fuel or water. We would often buy fish off them for dinner and use the fish heads and offal in our bait boxes. After a while, Dareen, Majid and Hussain managed to spend enough time on their boats filming and talking about the severity of their lives to verify that these fishermen were unable to target sharks even

they wanted to. Their tackle and equipment was designed for reef fish and sharks were sometimes a nuisance that would often steal their catch from the line.

We knew that Yemeni poachers were raiding the reefs in the Southern parts of Sudan's waters. But according to these Sudanese fishermen, Yemeni Sambuqs would even reach these Northern reefs and often venture into the protected areas knowing that there were sharks here. Insufficient policing of the protected areas was a big problem and the Sudanese coast is far too vast an area for the ill-equipped coast guard or navy to deal with.

From what we could ascertain, 2 or 3 Yemeni boats had been poaching this area only a couple of weeks before and had since moved South. Which might explain the scarcity of sharks we found on Sanganeb, Abington and Angarosh. Fearing the worse, it was time to head back to Port Sudan to drop off James, take on Dr. Ralf Sonntag (Director of IFAW, Germany) and to replenish our supplies before heading South.

We were keen to reach Sha'ab Ambar, having read some interesting papers profiling the area. Although the anchorage was not ideal in this set of reefs, the dives were stunning in their natural beauty and diversity. Despite the superlatives, we just couldn't seem to draw in the sharks to our bait boxes over the following 4 days. Even Sha'ab Tawartit and a few unnamed dive sites failed to provide us with much to work with and so once again, I asked Thibo to move us back North to Sanganeb and Sha'ab Rumi.

By the end of our 4 week charter on M.Y. Deli, most of us had managed to conduct over 80 dives on some of the finest wilderness reefs in the Red Sea. Despite the unquestionable beauty and wealth of these reefs, still in absolutely pristine condition, our overall joy and appreciation was tempered by an unavoidable tinge of disappointment. We had either been unlucky due to the transitory nature of the season we had chosen, or the Yemeni poachers had been far too successful over recent times. My instinct was telling me the latter and that the severity of the problem is being underestimated by regional authorities.

Coming to Sudan for Sharkquest Arabia was imperative. We had to get here as it gave us exposure to a country with a high density of sharks and we managed to get close to sharks in a way that revealed just why it is important to try to protect these amazing animals. I left Sha'ab Rumi with a deep sense of gratitude towards this little band of sharks that had exposed themselves to be intelligent, inquisitive, tolerant and so clearly vulnerable.

They had allowed us to get close and well inside their territorial instinctive boundaries and I feel privileged to have experienced their company. It is equally easy to see how fragile



their tenure on these reefs really is given the high likelihood of poachers reaching this far North. I think we all felt that in some way or another, we had connected with these sharks in some primordial manner and will forever carry the memory of these encounters.

However, what I feel we really left Sudan with was a growing sense of concern. Despite the reputation it has, it was clear that we hadn't seen as many sharks as we had hoped and I am afraid that shark finning has already had an impact on Sudan's reefs; and sadly there are simply not as many sharks here as before.



# SHARKWATCHARABIA.COM

## TO LAUNCH A SHARK PHOTOGRAPHY EXHIBITION



SHARK AWARENESS PHOTO EXHIBITION | 2010

### “PUTTING SHARKS IN THE PICTURE”

The region's first natural history photographic exhibition on sharks is now open for submissions.

The Sharkquest Arabia Initiative (SQAI) and Sharkwatcharabia.com are currently appealing for interesting and compelling images in order to compile a special educational photographic exhibition and collection of shark & whale shark photographs by re-known international and regional underwater photographers. Created in association with IFAW and in collaboration with EDA, the exhibition is open to all professional, semi-pro and amateur photographers, a final selection of 30 images will form the basis of a regional moving exhibition called 'Putting Sharks in the Picture'.

The aim of the organizers is to create an informative and exciting selection of images that show viewers how beautiful and special sharks are. Partly to help dispel the negative misconceptions and fears that perpetuate the way mankind fails to care about sharks; this exhibition will help to keep the subject and issues facing sharks in people's minds. The other aim is to educate the public about the diversity and natural history of sharks in Arabia's waters as part of the SQAI awareness initiatives.

Each selected image will be accompanied by a detailed information panel featuring the name of the photographer and their contacts, technical data, including details about the shark species featured with natural history, geographic distribution as well as behavioral and conservation status information. The combination of stunning photographs and educational information is designed to provide the public with exposure about sharks in our own waters.

Just a couple of months ago, we witnessed the failure of the biggest single dedicated effort so far by the international conservation community to help sharks through the CITES meeting in Doha. Sadly the outcome was a big disappointment and a disaster for the 8 shark species that were being proposed for addition to the Appendix II endangered trade list. Of those 8 species, 5 occur in the seas of Arabia and are sadly caught up in the shark fisheries and trade that supplies up to 8% of the fins reaching Hong Kong through Dubai. Whilst the CITES conference failed to protect these sharks this time round, it has created an opportunity for conservationists to highlight the issues facing our sharks and the need to do more to protect them. It also forced the authorities to realize they need to do more to resolve the shark fin trade and protection of endangered species.

All of this is reflected in the choice of theme and title of this photography exhibition – “Putting Sharks in the Picture”. This refers to the opportunity that currently exists to place the subject of shark conservation out in the open targeting this region's society at all levels.

The official launch of the mounted prints will first be held and displayed at the 2010 Arabian Seas Whale Shark Research Symposium & Workshop, to be followed by roaming exhibitions to be held at strategic locations in Dubai, Sharjah and Abu Dhabi. There are already plans to take the same exhibition to Kuwait in collaboration with KERA (Kuwait Environmental Research & Awareness Group).

### WHO CAN ENTER

Whilst we are accepting submissions from anyone, we are mainly inviting professional, semi-pros and amateurs to submit their images no later than September 15<sup>th</sup>. All submissions should be sent as high-resolution jpeg or PDF files to [sharkwatcharabia@gmail.com](mailto:sharkwatcharabia@gmail.com) accompanied by a detailed description of the subject, the technical aspects of the image and equipment used and written permission to use the image for the purposes of Sharkwatch Arabia and The Sharkquest Arabia Initiative.

### CATEGORIES

Participants can submit images for either category, but not both. All images will be printed as 70cm x 100cm digital prints and mounted on picture boards for display purposes.

#### CATEGORY 1 | SHARKS & WHALE SHARKS

This category is open for submission of a single high resolution jpeg or PDF image that depicts sharks photographed in Arabia's waters; drawn from the general diversity and range of elasmobranch species, including animal behavior and natural history.

#### CATEGORY 2 | PORTFOLIO

This category is open for submission of 3 – 5 high-resolution jpeg or PDF images of any elasmobranch species photographed throughout Arabia's waters. As a portfolio, the images should either simply show sharks in their natural habitats or cover a range of subjects telling a story through a sequence of events and issues.

### DATES

All images must be sent to [sharkwatcharabia@gmail.com](mailto:sharkwatcharabia@gmail.com) no later than September 15<sup>th</sup>, 2010.

### COMPETITION

In acknowledgement of the support and interest shown by the photographers that are taking the time to submit their images, the general public exposed to the exhibitions will be asked to select their favorite image in order to determine a 1<sup>st</sup> & 2<sup>nd</sup> place for each category. Winners will be decided through a tally point system where visitors will be asked to sign the exhibition register placing a tick mark alongside the reference number of their favorite image according to a simple set of criteria; including aesthetics, relevance and information. At the end of the first month of showing, the accumulative tick marks will be added up and winners selected.

The photographers selected will each receive a commemorative certificate of participation and winners will also receive prizes consisting of diving equipment, free weekend stays at Le Meridien Al Aqah Beach Resort with diving included and more prizes to be announced shortly.

### RIGHTS

All rights of each image received by the organizers will remain the property of the author. The organizers of this exhibition reserve the right to exhibit all and any of the images sent in during the full period of the exhibition. In addition, the organizers also reserve the right to use the images for the express purpose of promoting the exhibition in all print media and on-line within the websites of [www.sharkwatcharabia.com](http://www.sharkwatcharabia.com) and on the Sharkwatch Arabia Facebook pages.

Further information about the 'Putting Sharks in the Picture' exhibition will be published in the next issue of the EDA magazine and can be found on the Sharkwatch Arabia website as well as the Sharkwatch Arabia facebook pages. Alternatively, email enquiries can be directed to [sharkwatcharabia@gmail.com](mailto:sharkwatcharabia@gmail.com) or to [sharkquestarabia@yahoo.com](mailto:sharkquestarabia@yahoo.com).



# 2010 ARABIAN SEAS

## WHALE SHARK RESEARCH SYMPOSIUM & WORKSHOP



Photo by Warren Baverstock/Verstodigital.com

The Sharkquest Arabia Initiative and the Arabian Whale Shark Research Program are proceeding with the 2010 Arabian Seas Whale Shark Research Symposium & Workshop on December 11<sup>th</sup>, 12<sup>th</sup> and 13<sup>th</sup>, 2010 at Le Méridien Al Aqah in Fujairah.

As part of the whale shark film development, the Sharkquest Arabia team immediately saw the need to help create a platform so that the various Arabian Sea's fragmented and previously isolated research projects can start communicating and sharing data and resources as part of a regional Arabian Sea network.

This year's theme is entitled "Putting Sharks in The Picture" and features the launch of a regional Arab World shark awareness campaign and screenings of both Sharkquest Arabia documentaries.

The event will again be hosted by Le Meridien Al Aqah in Fujairah. Open to everyone, this second symposium promises to be even more

informative and important due to the addition of a 3<sup>rd</sup> day that will feature research of other shark species too, with a strong emphasis on the status of our region's shark fisheries.

Last years guest speakers will again be returning to update us on their research and the events of this year throughout the region. Additional speakers will be added to the growing list of researchers interested in participating. The recent CITES conference in Doha and disappointing results has led to a greater level of regional participation by researchers and conservation authorities from throughout the GCC, Yemen and Iran. Amongst the local participants, Atlantis has been invited to present their data collected during Sammy's tenure in their tank and from the PAT satellite tag fixed upon her release.

In addition to the main symposium's proceedings, guests and delegates will be shown a special preview screening of the 2 Sharkquest Arabia documentaries and this year also serves as the

occasion to launch the first Natural History Photography Exhibition featuring sharks.

Anyone interested to participate can please contact the Project Leader by email: [jonathanalikhan60@yahoo.com](mailto:jonathanalikhan60@yahoo.com).

Further information will be sent out to all interested parties via the EDA magazine and updated through the Sharkwatch Arabia website and Facebook page.

THE **2010**  
ARABIAN SEAS  
**WHALE SHARK**  
RESEARCH  
SYMPOSIUM & WORKSHOP

DECEMBER 11TH - 13TH, 2010





the Sharkquest Arabia Initiative presents  
**THE 2010 ARABIAN SEAS WHALE SHARK RESEARCH SYMPOSIUM & WORKSHOP**

# Putting Sharks in the Picture

**BECOME A SCIENTIFIC DIVER!!! December 11th, 12th & 13th, 2010**

The 2010 Arabian Seas Whale Shark Research Symposium and Workshop will be held in Fujairah hosted by LE MERIDIEN AL AQAH BEACH RESORT\* this coming December, 2010 and will now stretch over 3 days with the inclusion of presentations about other general regional shark research, the shark fin trade issues and whale shark research updates. All guest speakers from last year will be invited along with the addition of other international shark specialists and NGO's.

This international event will host Guest Speakers from Seychelles, Australia, Djibouti, Maldives, Mozambique, South Africa, India, Pakistan, Oman, Kuwait, Saudi Arabia, Qatar, Iran, United Kingdom, USA, Belize, Thailand, Philippines, Indonesia & the UAE. Guest speakers will also include regional Government Officials from Ministries and conservation authorities, CITES and the IUCN's Shark Specialist Group.

This year's theme is entitled "Putting Sharks in The Picture" and features the launch of a regional Arab World Shark awareness campaign and screenings of both Sharkquest Arabia documentaries ("Arabia's Whale Sharks - Gentle Nomads of the Arabian Sea" & "Arabia's Sharks - Life on the Edge") and a major Shark Awareness Photography Exhibition by reknown regional and international photographers.

PRESENTATIONS

**DAY 1 | GUEST SPEAKERS**

**WHALE SHARKS**

A full day of presentations by key guest speakers from UK, Australia, Seychelles, Oman, Mozambique, Maldives, India, Pakistan, USA, Belize, Thailand, Philippines, Indonesia, KSA & UAE

**DAY 2 | GUEST SPEAKERS**  
**SHARKS**

A full day of presentations by key guest speakers from IFAW, IUCN Shark Specialist Group, CITES, SHARKALLIANCE, Ministries & regional Conservation authorities.

**DAY 3 | WORKSHOPS**

SHARKWATCH ARABIA presents 2 workshops on our regional database & research photography

WORKSHOPS EVENT



SHARK AWARENESS PHOTO EXHIBITION | 2010



**SHARKWATCH**  
 ARABIA

[www.sharkwatcharabia.com](http://www.sharkwatcharabia.com)

Attend free workshops on  
 'Shark Fin ID & Monitoring of the Fin Trade'  
 'How to Support Our Regional Shark Database'  
 & 'The Basics of Research Photography'

## THE 2010 ARABIAN SEAS WHALE SHARK RESEARCH SYMPOSIUM & WORKSHOP

DECEMBER 11th, 12th & 13th, 2010



**FREE ADMISSION & SPECIAL HOTEL RATES**

If interested to attend, please RSVP to [sharkquestarabia@yahoo.com](mailto:sharkquestarabia@yahoo.com)  
 For more info, contact Jonathan Ali Khan on 00971 (0)50 7986743

Le Meridien Al Aqah Beach Resort rooms are available on a first come, first served basis. **SO BOOK NOW!**

Mention ASWSRP when making reservations. Alternative accommodation in other 4 and 5 star hotels is available near the venue along Al Aqah coastline.

SUPPORTED BY



HOSTED BY



ORGANIZED BY



pic by Warren Baverstock/verstdigital.com





SHARKWATCH  
ARABIA

# DIVING FOR A CAUSE

TURNING DIVERS AND THE SEA FARING COMMUNITY INTO 'CITIZEN SCIENTISTS'

Three new database websites; Sharkwatch Arabia, Turtlewatch Arabia and Marine Mammal Watch Arabia make up the data collection tool for a recently started research and conservation project that aims to collect information on marine megafauna in the region with particular focus on the whale shark and hawksbill turtle. The work will also form the basis of a post-graduate study being run through the Heriot-Watt University based in the UK and Dubai and supported by the Sultan Qaboos University, Oman.

This is the first true community based research project in the region that aims to utilize the regional diving and sea faring community to collect information on sightings and behaviour of the marine megafauna found within the Arabian Gulf and Gulf of Oman. The aims of the project include determining the population dynamics, movements and areas of importance of certain species through recorded sightings of certain species and identification of individuals within a population.

Diving and in particular underwater photography are part of a growing industry within the region. Given a small amount of training, any diver can become a researcher, turning each and every dive into a potential data collection experience. Many photographers are willing to participate in research activities and we have frequently used dive sites that support important marine life. So, we hope to turn our Gulf wide diving community into a powerful data collection tool. Collectively, our regional divers and dive operators spend more time underwater and cover more area than any dedicated research project could ever hope to achieve.

The project is being run in association with the Emirates Diving Association based in the UAE; who are helping to spread the word by getting the local dive community involved and providing logistical support for data collection. One very important part of the project is to feed the sightings back into the community

and so there will be quarterly updates on all sightings within the gulf for EDA members via their quarterly magazine and you can get frequent updates of news and sightings by joining either of the respective facebook pages. If a new animal is identified then the person who took the photo will be given the chance to name that individual.

If you have encountered a whale shark, shark, sea turtle or marine mammal in the waters of Kuwait, Iraq, Saudi Arabia (Gulf coast), Qatar, Bahrain, Iran, Pakistan, UAE or Oman in the past three years then we would like to hear from you. We would especially like to receive any pictures you have of large animal strandings, fishermen landing sharks or images of sharks taken in fish-markets throughout the region.

Three websites have been launched as the primary data collection tool of the project, these are:

- [www.sharkwatcharabia.com](http://www.sharkwatcharabia.com)
- [www.turtlewatcharabia.com](http://www.turtlewatcharabia.com)
- [www.marinemammalwatcharabia.com](http://www.marinemammalwatcharabia.com)

Anyone and everyone who sights any species of shark, turtle or marine mammal, are invited to log onto the site and submit their data.

The copyright of the photographs uploaded via the website will at all times remain the property of the individual submitting the picture. The photographs and contact information of the individual will be used for identification purposes only and will not be sent or used by any third party. Photographs will not be used for any other purpose without prior permission from the owner. All pictures submitted of whale sharks will eventually be loaded onto the global database managed by Ecocean at [www.whaleshark.org](http://www.whaleshark.org) and credit for the photographs will be given to the individual making the original submission.

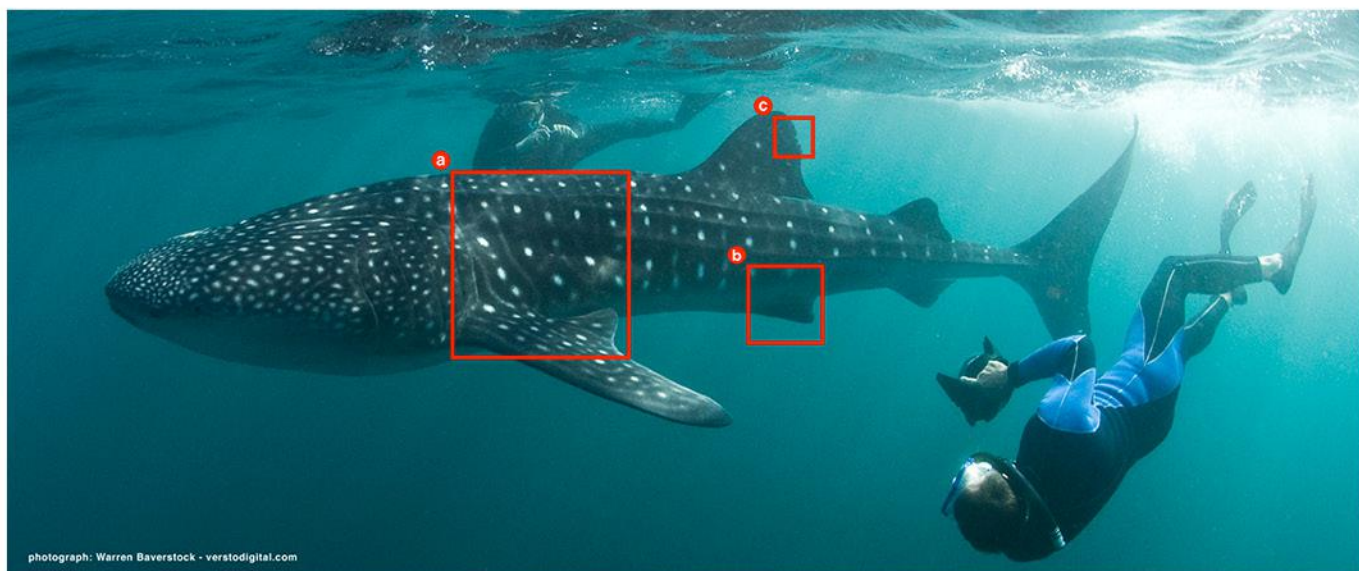
Sharkwatch Arabia was born from the decision to create a regional database taken during last year's 2009 Arabian Seas Whale

Shark Research Symposium & Workshop. Sharkwatch Arabia is being run in association with the Sharkquest Arabia Initiative and under the umbrella of Jonathan Ali Khan's Arabian Whale Shark Research Program; a project that aims to study all aspects of whale shark ecology throughout the region.

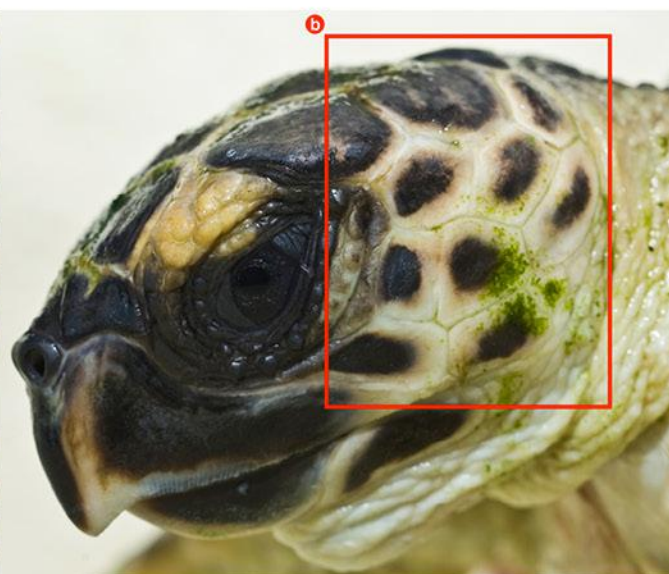
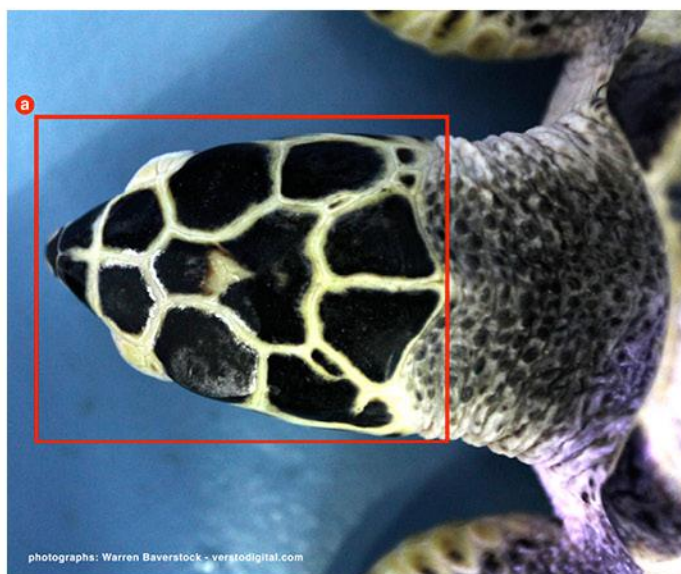
Referring to last December's Arabian Whale Shark Research Symposium, Jonathan says... "One of the conclusions resulting from our symposium was the clear need to gather previous, current and ongoing whale shark data from throughout the region. At first we thought we might create a direct extension of the global database set up by ECOCEAN. Unfortunately, the cost implication was too high and we soon realized that this data was needed for immediate reference purposes in order to build up a regional picture of whale shark populations. The only way that would happen would be if there were a dedicated research project set up to drive this whole initiative and so we are happy to extend every support we can. Our main aim is to help promote the database and community participation, but also to assist in getting into the field through our expeditions".

The ability to identify individuals within a population is an important aspect of any ecological or conservation based study. Information about correct photography for the identification of individual whale sharks, turtles and marine mammals can be found on each corresponding website. The goal of the project is to better understand the ecology of the studied animals with a view to providing increased conservation in the face of environmental impacts and climate change. Each and every person who ventures into our regional waters has the ability to help by simply sending in their photographs and sightings. We hope that by establishing this research project that we will be able to provide information that will help in the conservation of marine mega fauna throughout the Arabian Gulf and Gulf of Oman.

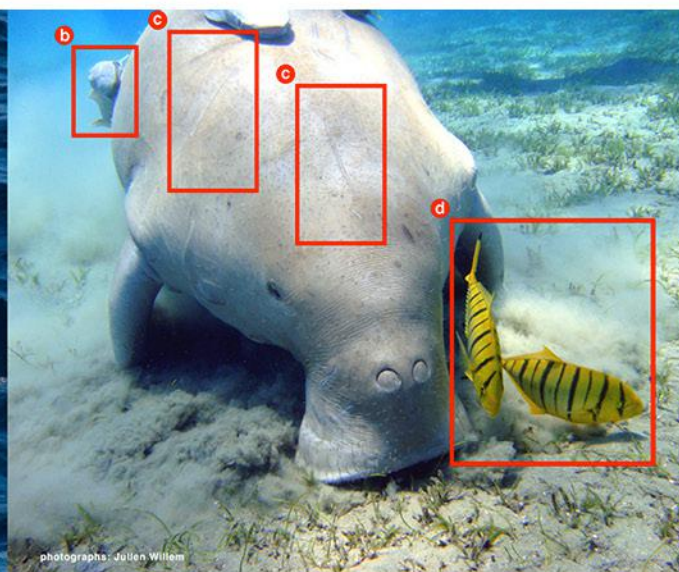




Whale Shark ID tips: (a) the white spots on sharkskin are individually distinct – try and take photographs of the left and right flanks to help with scientific software identification. (b) make a note of the shark's sex (male = claspers) if you are unsure take a photograph. (c) make a note or take photographs of any unique markings or damage to fins/tail.



Turtle ID tips: (a & b) try and photograph both profiles to help with scientific software identification – also make a note of any unusual deformities or damage to the carapace/shell.



Marine Mammal ID tips: (a) try and photograph dorsal and tailfins as they usually have unique markings generally caused by boat or predator damage. (b & d) whale sharks, turtles and marine mammals are ideal hosts for remoras and pilot fish – make a note of how many to help with confirming identifications. (c) make note or take photographs of any unique markings or damage to skin.



CALL FOR SUBMISSIONS...

# MIDDLE EAST NATURAL HISTORY photography exhibition

SHARKQUEST ARABIA & SHARKWATCH ARABIA are currently appealing for interesting and compelling images in order to compile a special educational exhibition of shark & whale shark photographs by international and regional underwater photographers.

**Deadline**  
September 15th, 2010

## Category 1 | Single Image

This category is open for submission of a single high resolution jpeg or PDF image that depicts sharks photographed in Arabia's waters; drawn from the general diversity of elasmobranch species, including animal behavior and natural history.

## Category 2 | Shark Portfolio

This category is open for submission of 3 to 5 high-resolution jpeg or PDF images of any elasmobranch species photographed throughout Arabia's waters. As a portfolio, the images should either simply show sharks in their natural habitats or cover a range of subjects telling a story through a sequence of events and issues.

**NOTE:** Participants can submit images for either category, but not both. All submissions should be sent as high-resolution jpeg or PDF files to [sharkwatcharabia@gmail.com](mailto:sharkwatcharabia@gmail.com)

For more information, please visit the website  
[www.sharkwatcharabia.com](http://www.sharkwatcharabia.com)

pic by Warren Bavestod/verstodigital.com

**PRIZES &  
AWARDS**  
for 1st & 2nd place  
winners voted by  
the public

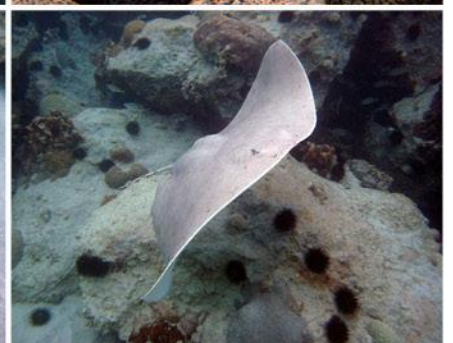




# IMAGES AT A GLANCE

**EDA MEMBER:** PHILIPPE LECOMTE

**ABU DHABI BREAKWATER**





# A COMMUNITY APPROACH TO THRESHER SHARK CONSERVATION ON LIMASAWA ISLAND – PHILIPPINES

FEATURE **JAN-WILLEM VAN BOCHOVE** (HEAD OF MARINE SCIENCE – CORAL CAY CONSERVATION)



A curious thresher shark emerges from the deep to take a closer look at divers in Malapascu Thresher Shark Research and Conservation Project 2010.

Limasawa Island is famously referred to as the "site of the first mass in the Philippines," where, according to local legend, Ferdinand Magellan helped introduce the people of the Philippines to Roman Catholicism (See Figure 1). More recently, Limasawa has developed a name for itself as a haven for majestic elasmobranchs (sharks and rays) – encounters with the whale sharks are frequent and it's believed there is potential to dive with the elusive thresher shark. The island, located to the south of Sogod Bay in the province of Southern Leyte, is blessed with an incredible diversity of coral reef species and seasonal mega-fauna. Visitors to these include whale sharks, manta rays and thresher sharks (See Figure 2). Although still unclear why Limasawa attracts these gentle giants, it's believed they swim up from the deep to visit inshore cleaning stations near the island.

The thresher shark visits have not gone unnoticed by Limasawa's very adept fishermen, who catch them by the dozens during the fishing season between April and July and sell the fins to the local markets, making a modest profit. At the current rate of harvest, the shark industry on the island is likely to be unsustainable. On hearing about the scale of the fishery on the island, Coral Cay Conservation (CCC), a UK based marine conservation NGO working on the invitation of the Provincial Government since 2002, conducted several visits to Limasawa to assess the magnitude of the island's shark fisheries.



Once confirmed, a stakeholder based awareness programme swung into action. The collective aim was to provide information to local fishermen, government officials and schools about the importance of thresher shark conservation and its greater economic value as a potential eco-tourism enterprise. The response was overwhelmingly positive and further assistance was requested by the community members to develop a sustainable means of profiting from the thresher sharks frequenting the area. One of the village elders, an experienced fisherman was particularly moved by the programme and said: "I am 57 years old and have fished sharks for my family for 40 years. But now, no more!"

In order to develop a sustainable programme, outside expertise was sought from Simon Oliver and his team from the Thresher Shark Research and Conservation Project (TSRCP), a not-for-profit organisation who have been undertaking extensive scientific research into the ecology and behaviour of thresher sharks in the Philippines. Simon is the principle investigator for the project, which is based on Malapascua Island, one of the few places in the world where divers can observe the thresher sharks interacting with cleaner wrasse. With the community's involvement and approval, CCC along with TSRCP met government

## CORAL CAY CONSERVATION



officials from the departments of fisheries, the environment and tourism to discuss ways of turning the current fisheries industry on the island into a more economical and sustainable community led tourism enterprise.

CCC's educational and awareness drive has gone from strength to strength and is creating more understanding and appreciation for the importance of these magnificent creatures and in doing so, we have begun to address some common misconceptions surrounding thresher sharks.

In the Philippines, there is a dogma surrounding sharks and most people believe they are all man-eaters, waiting to attack anyone crazy enough to swim in the ocean.

To address this misconception, we challenged



our audience on Limasawa to rank pictures of a toilet, dog, bucket and shark from least to most dangerous. To the amusement and disbelief of the crowd, toilets are the most dangerous with 43,000 fatalities a year and sharks are last with less than 4 fatalities per year! Educating the coastal communities about thresher sharks harmlessness to humans and importance in the marine food web manifests an understanding and respect for these magnificent creatures, even if it does create a sense of dread every time they need a visit to the porcelain princess! To communicate the message to a younger audience, CCC performed the "Terry the Thresher Shark" puppet show (See Figure 3). The story follows the trials and tribulations of Terry who is hoping to find his family again and eventually does in the safety of a marine protected area – illustrating to tomorrow's generation the importance of marine conservation in helping protect Terry and his family.

Interviews with the local fishermen confirm that the sharks are primarily caught near the southern tip of the island using a hook and line (See Figure 4). Most of the sharks appear to be Big-eye Thresher (*Alopias superciliosus*) but Pelagic Thresher species have also been caught (*A. pelagicus*); both are considered as 'vulnerable species' by the IUCN (International Union for Conservation of Nature). For further scientific input on the species caught, CCC is currently setting up stations where

tissue samples from thresher sharks caught by the fishermen are collected and sent to TSRCP who will analyse them in the UK to determine their species as well as provide important information on their population structure, dynamics and distribution.

The project is still in its early stages but if a suitable location can be identified where divers can observe thresher sharks, this site will be recommended as a no-take marine protected area (MPA). Once gazetted as an MPA, the second on the island, visitors will pay a small fee to dive with the sharks and the money will go directly to the Limasawa community.

To assist in the management of the MPA, CCC's scholarship programmes will build local capacity, training MPA wardens and dive guides thus giving them an alternative livelihood to shark fishing. If installed, the MPA will form part of the larger network of community-led MPAs in Sogod Bay, adding to the wider coral reef conservation partnership between CCC and the Provincial Government of Southern Leyte.

For more information visit [www.coralcay.org](http://www.coralcay.org) and [www.threshersharkproject.org](http://www.threshersharkproject.org). CCC would like to thank Simon Oliver and his team for all their technical support provided on the project thus far. Our gratitude also extends to our project partners and hosts, the Provincial Government of Southern Leyte for their continued support and guidance.



Coral Cay volunteers presenting a puppet show to a fascinated crowd of local school children as part of an educational awareness drive to promote Thresher Shark conservation on Limasawa Island. Coral Cay Conservation, 2010.



Coral Cay science staff and members of the Thresher Shark Research and Conservation Project posing at the site of the first mass on Limasawa Island. Coral Cay Conservation, 2010.



Local fishermen use simple hook and line fishing techniques to catch threshers by the dozens Thresher Shark Research and Conservation Project 2010.



# BEING AN ECO-FRIENDLY DIVER

FEATURE **STEPHANIE DAVIES – SCUBA DUBAI**

Environmentally conscious diving starts with education. Learn proper diving techniques so you can experience the thrills of exploring a new world without damaging coral reefs and other sea life.

Sign up at your favourite dive school or club for a PADI Peak Performance Buoyancy Course or similar. It does not matter which Diver Training Agency you qualified with, or how long you have been diving, a Peak Performance Buoyancy Course benefits most divers and reduces unintended damage to our wonderful underwater world.

Streamline and secure your diving equipment so it does not drag along the dive site. Watch your feet – tread carefully on shore, and in the water try not to disturb sea life with fin turbulence. Maintain neutral buoyancy to minimize your impact on your surroundings.

Look, but do not touch – or pry or poke or pluck or feed. Leave coral and sponges in the deep. Keep a respectful distance from marine animals, who may be trying to eat or mate.

Avoid grabbing underwater objects to pull you forward or to stop you drifting. Learn how to use a Reef Hook in a current. You will see so much more when you are relaxed and confident.

Plan your dive trips with dive centres that promote eco-friendly diving, through practices such as keeping groups small to minimize the impact on underwater habitat, and by responsible anchor and buoy use.

Above all, get involved!

Volunteer for a fish count, collect dolphin behavioural information or join in an underwater cleanup.

Join The Emirates Diving Association ([www.emiratesdiving.com](http://www.emiratesdiving.com)) and get involved in their projects.

Research the below action groups and find amazing opportunities to make a difference.

**[www.saveourseas.com](http://www.saveourseas.com)** – Save Our Seas is a non-profit making organisation headquartered in Geneva, Switzerland. Its purpose is to implement and support diverse programmes centered around the protection of the Earth's marine environment.

**[www.sharkquestarabia.com](http://www.sharkquestarabia.com)** – Shark Quest Arabia, a film project to raise awareness of Arabia's sharks and the global overfishing in this area.

Dr. John Burt is a marine biologist with New York University in Abu Dhabi. His research is focused on fish, coral, and other communities associated with natural reefs and man-made breakwaters throughout the Emirates, and he currently has projects in Dubai, Abu Dhabi, and Fujairah. John is always on the lookout for dive buddies to assist in the field. As a scientific diver, John's trips are "work" dives – reeling tapes, deploying equipment, shuttling tanks for underwater drilling, etc. and often on non-traditional dive sites (breakwaters, etc). Thus, these aren't your usual relaxing dives, and can involve spending hours at work on scuba (even in the sweltering summer).

Photo by: Leo Virgo



However, you will get to dive on some very unique locations that are often inaccessible to the public, and John will give you a great crash-course in the marine ecology of the area. Dives are all < 10m depth and tanks are provided. Contact [John.Burt@nyu.edu](mailto:John.Burt@nyu.edu) for more information.

Do your own research and get involved with a passion!





# EARTH HOUR, WHEN IT WENT DARK

FEATURE EWS-WWF (EMIRATES WILDLIFE SOCIETY IN ASSOCIATION WITH WWF)

"Switch off the lights. Turn on the earth".  
Pedro Almodovár

And the UAE responded loud and clear! As buildings across the country went dark at 8:30pm on the 27th of March, we stood side by side with 126 other countries in this call to action. Darkness shrouded many of the UAE's iconic buildings – Burj Khalifa, tallest tower in the world, Burj Al Arab, the Sheikh Zayed Mosque, Al Yas Hotel, just to name a few – in a dramatic gesture. Residents across the UAE showed their support in a multitude of ways; some sending their message from the solitude of their homes, switching off their lights and enjoying a rare view of a starlit sky, while others took to the streets on a lantern march, one of many gatherings and events around the cities of the UAE.

The UAE residents joined millions around the world in this symbolic act, contemplating the challenges ahead, and celebrating this planet, our home, that has sustained us across all borders and boundaries.

## WHAT IS EARTH HOUR?

Earth Hour is a global initiative that demonstrates how we, as individuals, as organizations, and as governments, can address the threat of global warming if we resolve to work on it together.

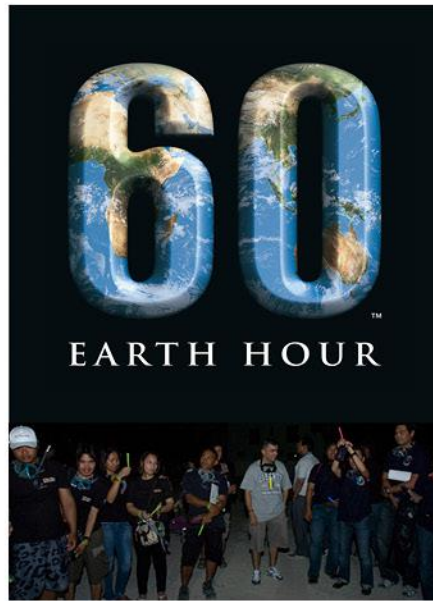
The event aims at uniting people from all countries and communities, ushering in a new era of environmental consciousness by encouraging personal accountability and behavioural change to facilitate a low-carbon lifestyle.

Earth Hour calls on the world's most iconic landmarks to switch off their lights for one designated hour, joining people across the globe, in a symbolic act of unity to tackle climate change.

Earth Hour is not about the amount of energy that can be saved in one hour. Rather, it is a call urging people to think about the environmental challenges that climate change will bring, to look at how our behaviour is impacting this planet, to rethink our current lifestyle and perhaps, to consider a more sustainable way of living. It is a reminder to ourselves, and a call for action on others, to do whatever is necessary in order to protect this planet that is a home to us all.

## HOW DID IT START?

2007 – The first Earth Hour took place in Sydney on 31 March 2007, when over two million people and two thousand businesses across the city turned off their lights and appliances for one hour. From its relative humble beginnings, the Earth Hour message has swept the planet.



2008 – On 29 of March 2008, 50 million people across 35 countries turned off their lights in support of Earth Hour, sending a message across the globe that the collective actions of individuals really can change the world.

2009 – On 28 of March 2009, hundreds of millions of people took part in the third Earth Hour. Over 4000 cities in 88 countries officially switched off to pledge their support for the planet, making Earth Hour 2009 the world's largest global climate change initiative at the time.

2010 – Earth Hour 2010 took place on Saturday 27 March at 8.30pm (local time) and was a global call to action to and by individuals, businesses and communities throughout the world. Over 4000 cities in 126 countries and territories joined, setting a world record once again. This also included around 1387 icons and landmarks that switched off for Earth Hour. Earth Hour reached more than 6 million online social network friends.

## EARTH HOUR UAE 2010

The UAE joined the first global Earth Hour

event in 2008. In 2010, the participation from the government and private sector has exceeded the previous two years, with 156 organisations signing up. Thousands of residents joined this celebration, whether from homes, from one of the many Earth hour events, or simply by turning off all electricity before going out to enjoy a candle lit dinner at a restaurant.

In an act of solidarity, many houses went dark, entire communities and office buildings switched off their lights, and numerous restaurants and hotels offered the opportunity to enjoy candlelit dinners. Meanwhile, the country's most iconic buildings switched off their lights, while several gatherings were arranged for the socially oriented among us.

## ICONIC BUILDINGS IN THE DARK

The world's tallest building Burj Khalifa and the resting place of the UAE's founding father, the Sheikh Zayed Bin Sultan Al Nahyan Mosque joined other iconic UAE landmarks including, the Emirates Palace, Raffles Hotel, ADIA Building, Burj Al Arab, Jumeirah Emirates Towers, Aldar Head Quarters, Sharjah Mega Mall, Sharjah Science Museum, Fairmont, Tecom, Media One Hotel, Dubai World Trade centre, the Yas Hotel and Yas Marina Circuit, Sas Radisson Hotel Blue and many more. By 'flicking the switch' on those signature landmarks, these organizations showed their support, joining the community in this call.

## LANTERN MARCH ON BEACH ROAD

A great Earth Hour event was organised by DEWA (Dubai Electricity and Water Authority); it took place on Beach Road, on Saturday 27th March. The purpose of this event was to be a source of information for those who wanted to learn more about the environmental initiatives of companies in Dubai, and a chance for NGOs to network and inform the public of their work for the environment. A march took place between 8.30 and 9.30pm in front of the Jumeirah Beach Hotel, where many residents walked together showing their support for Earth Hour.

EDA and their members got together and joined in the march on Beach Road



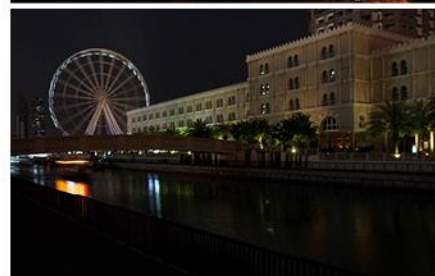


# FEATURE

## The participating organisations were:

1. Abu Dhabi Airports Company
2. Abu Dhabi Motorsport Management – Yas Marina Circuit
3. Abu Dhabi Municipality
4. Abu Dhabi Ports Company
5. Abu Dhabi Transport Authority
6. ADGAS
7. ADIA
8. ADWEC
9. AFC
10. Al Manzil and Qamardeen Hotels
11. Al Qasba
12. Al Qasr
13. Aldar HQ building
14. Aldar Properties PJSC
15. Beach Kiosk
16. Better Homes LLC
17. BUNDUQ Oil Company Ltd.
18. Burj Al Arab
19. Burj Khalifa
20. C&I
21. Canon Middle East
22. Centre of Ambulance Services
23. Clifford Chance
24. Coca Cola Middle East
25. Corporate Office
26. DAMVillas
27. Department of Tourism and Commerce Marketing
28. Department of Tourism and Commerce Marketing Dubai
29. Department of Transport
30. DNVPS
31. Dome International LLC
32. DPG Customers
33. DPG Employees
34. DPG Investors
35. DPG Suppliers
36. Dubai Aluminium Company Limited
37. Dubai Chamber of Commerce
38. Dubai eGovernment
39. Dubai eGovernment
40. Dubai Electricity and Water Authority
41. Dubai First Bank
42. Dubai Holding
43. Dubai Land Department
44. Dubai Municipality
45. Dubai Police
46. Dubai Properties Group
47. Dubai Silicon Oasis Authority
48. Dubai Sports Council
49. Dubai World Trade Center
50. Dubai World Trade Centre
51. Dulco
52. Eco-Chicks
53. Edama Consulting
54. Emaar Properties
55. Emirates Academy
56. Emirates Diving Association
57. Emirates Group
58. Emirates Palace
59. Emirates Wildlife Society – WWF
60. Enpark
61. Enviromena Power Systems
62. Environment Agency – Abu Dhabi
63. Environment Friends Society
64. Etihad Airways
65. Etisalat Dubai
66. Etisalat Fujairah
67. Etisalat Head Office – Abu Dhabi
68. Etisalat Ras Al Khaimah
69. Etisalat Sharjah
70. Fairmont Bab Al Bahr
71. Fairmont Dubai
72. Schneider Electric FZE
73. Farah Leisure Parks Management
74. First Select International
75. Fujairah Municipality
76. Gartner Gulf
77. GEMS Education
78. General Electric
79. Global Careers
80. Grosvenor House Dubai
81. Hamham School
82. Health Club
83. Heilbronn
84. Hilton Dubai Jumeirah
85. Hilton Ras Al Khaimah Hotel
86. HSBC Bank Middle East Ltd
87. Hyatt Regency Dubai
88. Ibis Al Barsha
89. Imdaad LLC
90. India Club
91. Jones Lang LaSalle
92. Jumeirah Bab Al Shams

93. Jumeirah Beach Hotel
94. Jumeirah Emirates Towers
95. Jumeirah Group
96. Jumeirah Living World Trade Centre Residence
97. Jumeirah Restaurants
98. KEO International
99. Khidmah LLC
100. KMPG
101. Knowledge and Human Development Authority
102. KONE Middle East
103. Kraft Foods
104. Le Meridien Al Aqah Beach Hotel
105. Le Meridien Al Aqah Beach Hotel, Fujairah
106. Le Meridien Al Aqah Beach Resort Fujairah
107. Le Royal Meridien Beach Resort & Spa Dubai
108. Lotus Grand Hotel Apartments
109. Madinat Jumeirah
110. MAF Dalkia Middle East
111. Malakiya Villa
112. MasdarMasdar Institute of Science and Technology
113. Media One Hotel
114. Meydan
115. Mina Al Salam
116. myfootprint.ae
117. National Bank of Abu Dhabi
118. Nokia MEA
119. Nokia Siemens Networks
120. Noor Islamic Bank
121. NORR Group Consultants Int'l
122. Pai Thai
123. Papillon Beauty Salon
124. Pier Chic
125. Polarcus
126. Radisson Blu Hotel Dubai Media City
127. Radisson Blu Residence, Dubai Marina
128. Raffles Dubai
129. RAK
130. Rivington
131. Rota
132. RTA
133. SAI
134. Segretto
135. Sharjah
136. Sharjah Aquarium
137. Sharjah Megamall
138. Sharjah Science Museum
139. Sheikh Zayed Mosque
140. Sheraton Abu Dhabi Hotel & Resort
141. Sheraton Jumeirah Beach Resort & Towers
142. Spa
143. TECOM Investments
144. The Dubai Mall
145. The Yas Hotel
146. TNH
147. Traders Hotel, Dubai
148. Trakhees-EHS
149. Trane Middle East
150. Twofour54
151. Union National Bank
152. Urbano
153. Wasi Asset Management Group
154. Wild Wadi
155. Yas Island
156. Yas Marina Circuit





## GASCO DIVING CLUB: CELEBRATED ITS EIGHTH YEAR

FEATURE **ABDULLA AYOUB**

GASCO RECREATION COMMITTEE (GRC) in Abu Dhabi – Gas Industries Limited (GASCO) was formed to facilitate and provide social, educational, and healthy activities for GASCO employees and their families. By organizing social events and various sporting activities, the GRC aims to support GASCO's 21 commitments to family and community.

GASCO Diving club is one of the sports activities that GRC has established. The club was formed in 2002 to encourage and promote quality sport activities to GASCO interested staff, and to play a role along with the specialized authorities and organizations to protect and maintain the marine life in the UAE.

Initially, the club started with six PADI open water divers. Currently the club hosts 35 enthusiastic GASCO divers most of whom are holding Advanced Open Water Certification and one Rescue diver and a photographer.

The dream came true and the planned objectives of the club turned to reality. The past years tell how it was filled with many interesting and valuable activities:

### CLEAN-UP ARABIA:

With the belief that, "preserving our marine environment goes hand in hand with preserving our culture and heritage", a great attention was given by GASCO's Management for an effective participation in most of the local under water clean-up campaigns which are organized by EDA.

GASCO Diving Team had consecutively participated in all clean-up campaigns starting from 2004 to 2009.

With an aim to enhance diving experience and visit the world's top diving sites, GASCO Diving Club organized many local trips to Dubai, the eastern coast and Ras Musandam in addition to many international trips:

### SHARM EL SHEIKH – 2005

It was the first international dive trip. Planning such a diving trip was no easy task. Divers had to consider the change in environment and their own personal safety before submerging into the water as the depths were extreme and unreachable.

A team of nine divers joined the exciting and adventurous opportunities that truly show how amazing the Red Sea under water is.

The trip was done to enjoy team spirit and social relationship amongst the GASCO diving team, which was in line with GASCO's 21 journeys. The team was headed by the GASCO Public Relations Manager Mr. Khalid Al Kendi.

### THAILAND – 2006

The trips were not just about diving. The team also visited wonderful bays and lagoons with white sandy beaches, swam during surface intervals in crystal clear blue waters of the Andaman Sea.

This trip has been one sensational dive after another; from beautiful coral reefs to tiger sharks every dive proved to be more incredible than the one before. The main dive sites were Shark Point, King Cruiser, Anemone Reef, Koh Dok Mai, and Phi Phi Islands.

The trip met its objectives by enriching the diving experience and knowledge of the diving team, set an excellent example for unity, harmony, commitment and created an opportunity for the team to interact with new people and learn from different cultures.

### PHILIPPINES – 2007

GASCO Diving Club organized another exciting diving trip; it was to Puerto Galera, approximately 160 km from Manila.

Puerto Galera offers about 40 prime dive sites. The clear water is very common to the dive sites, along with a fantastic variety of underwater flora and fauna.

We were able to dive amongst the very best dive locations with minimal effort and all exceeded our expectations, every dive was a great dive.

As in all other trips the team was headed by the GASCO Public Relations Manager Mr. Khalid Al Kendi, where he gratefully arranged for the team to be honoured by meeting the UAE Ambassador. The UAE Ambassador was updated on the trip's objectives and the end results. During the meeting memorial gifts were exchanged.

### INDONESIA – 2008

Bali's most famous diving area, Tulamben Bay was the subsequent trip in 2008. Tulamben is situated in the richest marine biogeographic zones of the world. It has one of the world's top ten dive sites, as it has the USAT Liberty Shipwreck. The dive was suitable for all levels of qualification and experience.

The black sand of Tulamben provides an excellent colour contrast for the incredible variety of marine life, which includes a huge school (literally 100's) of silver fish. Tulamben was a wonderful place to learn about underwater life.

The team enjoyed shore diving, wreck diving, wall diving, night diving, and deep diving.

The team had enjoyed white water rafting, kayaking and team building activities in Bali.

The action started in an 8 km river stretch, navigating through 27 rapids set to a backdrop of wild unspoilt rainforest, towering gorges and magnificent rice paddy terraces.

### SEYCHELLES – 2009

Again, GASCO Diving Club has organized an exciting trip to one of the most beautiful islands, and one of the top diving destinations, Seychelles Islands.

The diving adventure started in the second day and lasted for five consecutive days with some of the most exciting underwater sceneries, with huge granite boulders as backdrops surrounded by thousands of fish. Octopuses, turtles, sting rays, manta rays and white tip sharks were among the animals we have seen.

An underwater cleanup campaign was organized in the reserved Marine Park as well. 12 divers dived to express their passion and commitment for the environment to a depth of 10-15 meters searching for litter. Many glass bottles and plastic bags were collected in mesh bags and brought to the boat for further segregation and processing for recycling.

The trip was successful by all means as it has built a unique relationship among the diving team members, enriched their diving experience and promoted GASCO as one of the world leading companies that cares for its employees and environment.



Mr. Maher Al Wazir, founder of the GASCO diving club, after eight years has to now start a new life abroad. The team could not let him go before enjoying a spectacular dive with him on the eastern coast of the UAE as a going away farewell.

Gasco diving members wish Mr. Al Wazir, success, prosperity and all the best in his new future.



# LATEST GADGETS IN SCUBA DIVING

FEATURE PREMIERS FOR EQUIPMENT

## FEATURES:

- SmartGlo backlighting and audible alarms keep you current when every second counts.
- Precision Digital Compass including North, reference modes and declination adjustment
- Titanium Housing
- Dot Matrix Display provides superior readability and intuitive user interface
- Digital Watch, Air, Nitrox, Gauge and Free Dive Modes
- Switch between up to 3 independent wireless transmitters, tracking 3 Nitrox mixes or buddy's tank pressure with Buddy Pressure Check™
- Audible Alarms with User Acknowledgment
- SmartGlo® Backlighting
- Includes OceanLog® PC Download and Settings Upload Software and USB cable

Scuba diving equipment has come a long way in the last decade joining the influx of latest gizmos in the market. The evolution of technical diving has resulted in diving products that offer a wide range of options and customization. Now, these hi-tech gadgets liberate individual diver's needs which is important due to ever-changing environments and challenges.

From a simple mask to a new state of the art diving computer, they put diving technology in a completely new level.

Here are some of the latest gadgets which are available in the UAE.

Naturally, the OCI features the state-of-the-art in function, style and performance. Divers can choose from Slate Blue or Orange colours that accent the forged Titanium wrist mount body. Oceanic's revolutionary wireless air integration works in tandem with the unique "Buddy Pressure Check" feature that helps divers know the status of their diving companions. A new digital interface (similar to a cell phone) makes programming simple. Large graphics make reading the advanced digital compass, stopwatch and multiple timers and alerts a breeze.

"Divers have asked to have 'everything in one package' and the OCI delivers that in a major way," said Doug Krause, Oceanic Marketing Manager. "Today's divers have a variety of needs and requirements. The OCI is perfect for the recreational diver, the technical diver and the diver that does both. This innovative tool combines all of the features that Oceanic divers have enjoyed for years and puts them in one lightweight, compact, functional tool that can be worn on the wrist."

Krause adds the OCI features at least a dozen new features or improvements that have come directly from users of other advanced Oceanic dive computer products.

The OCI comes with a transmitter, wrist strap extender, USB cable and complete download software for upgrades.



## OCEANIC EOS/FOX-10 REGULATOR

### FEATURES:

- Yoke/DVT
- Pneumatically balanced second stage automatically maintains inhalation effort throughout dive
- Diver adjustable inhalation effort
- Patented Dynamic Adjustment automatically maintains inhalation effort throughout the dive
- Adjustable Venturi Switch (A.V.S.) for simple Dive/Pre-Dive Adjustment
- Stainless steel inline ball swivel reduces jaw fatigue
- Angled ports for ideal hose routing
- Paired with Oceanic's rugged FOX-10 Forged Over-Balanced Diaphragm First Stage featuring DVT (Dry Valve Technology) and Enviro Kit

With Oceanic's new EOS regulator every breath is a dream come true. For over 30 years, Oceanic's R&D group has taken advantage of new materials, development of rapid prototyping, advanced computer aided design systems, objective testing, and lots of open water dives in an effort to develop a regulator with the lowest measurable inhalation effort in order to provide air to a diver at the extremes of human capacity.

When engineering brought the near complete EOS in for conformational testing the results were so astounding, the laboratory stopped testing and performed a complete calibration of all instruments, and in re-testing the EOS was found to have a near effortless inhalation resistive effort on test after test. Perfect.

Comprised of precision-machined components and extensive research and design, the EOS regulator has achieved an incredible feat... lifelike breathing. Oceanic's gifted team of design engineers has included effortless breathing, inhalation effort adjustments, and comfortable second stage swivels and orthodontic mouthpieces into a regulator that you can hold in the palm of your hand. This is far more than just another regulator in the eyes of the Oceanic team, this is a dream come true.

## OCEANIC DATAMASK HUD

### FEATURES:

- In-mask Digital Optic System provides a clear, highly magnified image of the LCD, which is viewable regardless of environmental conditions and may be seen clearly by the vast majority of people, regardless of vision
- Allows "Hands-Free Diving" for greater convenience, enjoyment and safety during the dive
- Wireless Air Integrated Technology with

patented AirTime Remaining Algorithm

- Audible Alarms with User Acknowledgment
- Adjustable backlight intensity may be set on the surface or underwater, allowing the user to fine-tune display so that it is easily readable, yet not distracting
- Advanced User Settings & Options
- Diver Replaceable Batteries
- OceanLog® PC Download and Settings Upload Software and USB Cable included



Have you ever thought about the idea of diving without a dive computer on your wrist?

Well the Oceanic Datamask HUD dive computer simply allows you to do that. The dive computer is integrated in the mask. It represents itself as a small LCD panel that shows depth, the psi of air in your cylinder, time, and decompression stop info and the most important part is "You can always see them in front of you", without use of your hands. The miniature LCD allows you to keep your eyes focused on the dive while presenting critical diving data including: current depth, elapsed dive time, cylinder pressure, and dive time remaining.

The Digital Optic System provides a clear, highly magnified image of the LCD, which is viewable regardless of environmental conditions and may be seen clearly by the vast majority of people, regardless of vision. Like all other dive computers this one also has the ability to warn you if you ascend too quickly, you're low on air or have already spent a lot of time at depth, etc. It also has user replaceable batteries, and allows uploading of dive data to your computer.

## OCEANIC PROBE LX

The Probe LX is the top of the line jacket-style BCD from Oceanic. This is the BCD for those who prefer a jacket and who like to carry lots of gadgets. Of course the Probe isn't for everybody, but if you're into your gadgets and don't mind the extra weight it could be just what you're looking for.

### Weight Integrated

The Oceanic Probe LX is equipped with Oceanic's patented QLR (Quick Lock & Release). This system works fantastically – just slide the weight pockets in, push the Velcro down, and snap the locks into place. It's even easier to remove the weight pockets – just a strong tug and they're free. In addition to the QLR pockets, which take



up to 10lbs each, the Oceanic Probe LX also has two non-dumpable pockets in the back that can take up to 5lbs each. This is really great for fine tuning your trim in the water:



## Air XS 2 Alternate Inflator

The Oceanic Probe LX comes with an optional Air XS 2 alternate inflator. This is good news for those divers who aren't a fan of gauges and tubes. You can integrate your alternate air source and low pressure inflator in one simple package. The low pressure inflator works just like a regular low pressure inflator but now has an additional mouthpiece and big blue purge button.

## Pockets, pockets, and more pockets

The beauty of the Oceanic Probe LX is its storage capacity. Using the two huge zippered pockets at the front you can carry almost anything. These pockets are perfect for small cameras, underwater lights, or just about anything else you can think of. I managed to fill the pockets with a camera, an underwater light, a snorkel, and a spare mask and I still had space left over. The Probe also has two zippered utility pockets that come in handy for carrying signaling devices, reels, pocket masks, etc.

## Plenty of places to hang your gadgets

With 7 stainless steel D-Rings, the Oceanic Probe LX will never leave you wondering where to hang your gadgets. You'll find two D-Rings at the bottom of the BCD, two at the front, one on the right shoulder and two on the left shoulder. This leaves plenty of places to hang reels, cameras, slates, pony bottles, and just about anything else you can think of. I tend to believe that when it comes to D-Rings the more the better and the Probe definitely lives up to all my expectations in this department.

## FEATURES:

- Heavy-duty tech oriented features in a jacket style BC
- High lift capacity and minimum drag when deflated with patented BioFlex® bladder
- QLR Integrated Weight System accommodates up to 20lbs, plus dual 5lbs. rear weight pouches for improved in-water positioning
- Pre-bent welded stainless steel d-rings
- Integrated instrument retractor mount (retractor not included) and Spinner Knife mounting grommets. Pictured with optional Air XS 2 Alternate Inflator and Spinner Knife
- 2 oversized zippered main pockets

- 2 zippered utility pockets easily accommodate a light, extra mask, pocket snorkel, reel, or signaling device
- Reflective accents
- Patented adjustable depth compensating cummerbund
- Front operated rear pull dump

Bladefish is the name of the company responsible for the new range of DPV's (Dive Propulsion Vehicles) uniquely powered by Lithium Ion!

Unlike lead acid batteries which are large, heavy and difficult to maintain, the Lithium Ion technology in the new range of BladeFish® SeaJets is a result of advanced research and development. The revolutionary design means the new generation of SeaJets are Light, Compact, Fast and Reliable.

There are 3 different models available, but if you're an experienced diver we'd heartily recommend the Bladefish 5000, with 3 speeds, up to 2 hours of battery life and suitable for use in depths of up to 50m. They're made from high-grade polycarbonate, and the batteries incorporate a fancy multicell monitoring chip to maximise output and efficiency. It's an ideal holiday companion – just charge it up and dive in. It only takes 2 hours to rapid-charge to 80% capacity (and only 1 hour for the 5000 model).

Best of all they're wonderfully light, the heaviest model weighing in at a mere 5kg, so no need to stress about excess luggage. For a truly immersive experience, get yourself a Bladefish SeaJet

## FEATURES:

- Battery: Lithium Ion 18v (Duo)
- Power Rating: 220 watts
- Motor: Chuangji 18v
- No. of Speeds: Three Speed
- RPM (max): 550
- Speed Rating: 6kmh (3.75 mph)
- Depth Rating: 50m (165ft)
- Run Time (approx): 70-120 mins
- Weight: 4.7kg (10lbs 6ozs)
- Dimensions: 380mm x 360mm x 160mm (15"x14"x6" approx)
- Buoyancy: Near Neutral
- Charger Type: Fast
- Charging Time: 4hrs
- "Ready to Go" Charge Time: 2hr

## BLADEFISH 5000

### Oceanic OCI Dive Computer

Revolutionary new Oceanic OCI Dive Computer is the FIRST to offer Oceanic's exclusive "Dual Algorithm Feature".

The OCI is the first and only dive computer to offer divers a choice of diving algorithms designed to maximize dive time within proven safe limits depending on the type of diving being conducted (Pelagic DSAT, based on Powell/Spencer data, is ideal for repetitive, multi-level recreational diving profiles or the new Pelagic Z+, based on Buhlmann ZHL-16C, for more advanced, technical diving applications). A deep



stop countdown timer may also be activated by the user with either algorithm.

Close to three years in engineering and development, the OCI benefits from more than 25 years of Oceanic computer technology and expertise. Recent technological advances now allow divers to upgrade the OCI computer online as product enhancements or new features are released. In addition, the wireless transmitters are "backwards compatible" to work with other Oceanic products including the popular Oceanic DataMask.

While the OCI is certainly user-friendly and simple to use, first-time users and Oceanic professionals may need targeted instruction on how to get the most from the new interface and product features.

## OCEANIC V-16 FINS

### Features:

- Patented Nature's Wing® Propeller Fin Technology with four (4) material compounds for ultimate performance and light weight
- Semi-rigid battens and natural rubber flex channels precisely control the shape of the blade during the fin stroke to optimize power and reduce drag
- Oversized side rails add rigidity and control movement of the blades for increased lift, power and efficiency
- Ergonomically designed foot pocket accommodates virtually all foot sizes and boot styles
- Angled blade for preferred angle of attack
- Easy on/off fin strap with thumb loop
- Easy adjust quick-release buckles



Speed, comfort, and maneuverability; you can have it all with the Vortex V-16. The V-16 combines the patented design concepts divers have come to expect from Oceanic with a new mix of materials that enhance performance and style. Compared to conventional fins, the V-16 is up to 30% faster and more efficient, with less effort, stress and strain resulting in greater comfort and control.



Premiers For Equipment is the sole distributor of OCEANIC products in the UAE and other worldwide diving companies. They have a shop located at Al-Meena near the Fish Market, Abu Dhabi City. Tel: +971 2 673 5955



# SHARKS, CAGE, CAMERA – ACTION!

FEATURE AND PHOTOGRAPHY **WARREN BAVERSTOCK** – [WWW.VERSTODIGITAL.COM](http://WWW.VERSTODIGITAL.COM)



I have been diving with sharks in public aquariums for over ten years now and no matter how big or small the exhibit, I never get tired of having guaranteed visibility topped off with exciting predator encounters. There is nothing quite like descending into an exhibit and coming face to face with a predator usually only seen on the Nat Geo TV channel or in a dive magazine. One of the most exciting things for me whilst diving in an aquarium is seeing a large shark swim directly for me and veer off at the very last second. This invokes a feeling of respect and admiration within me every time. I have had many memorable encounters in my career but I will never forget the day that the Dubai Aquarium and Al Boom Divers invited me to try out their brand new PADI Specialty Course; Dubai Aquarium Specialty.

Not knowing what to expect, I arrived at the mall and received a warm greeting from the Al Boom team. My tutor for the day was Ryan and as I had never dived at the Dubai Aquarium before my first presentation session was to be the exhibit induction course. During this presentation I learned all about the characteristics of the exhibit, the animals that reside in it, the rules and regulations involved and most importantly diver safety. Initially, looking in from the outside of this exhibit one feels slightly intimidated, especially with a cave full of sand tiger sharks and a couple of giant groupers thrown in for good measure. After the introduction session I was ready to dive and felt totally at ease with what to expect.

With equipment donned and a buoyancy check

completed, Ryan and I descended into the exhibit without my camera for my orientation dive. Down at eleven meters and the first of many encounters during this dive is a young leopard shark followed by a closer than close inspection by one of the recently introduced hammerhead sharks. Making our way over to the shark cave and I find myself thinking about the many photographic opportunities that will be available to me on the next dive. At around eight metres I looked down into the darkness at nearly all thirty-two sand tiger sharks in the caved area and I find myself thinking about how to get this almost impossible shot. It was not long before Ryan was signaling to me that it was time to make our way back and as we ascended I felt satisfied that I was ready to jump in with my camera and get the shots I wanted.

Back on the surface and the second presentation with Ryan was all about taking photographs within the Dubai Aquarium exhibit and how to get the best results. During this presentation Ryan covered photography basics such as pre and post dive camera maintenance and different types of photography such as macro and wide, with or without flash. All the time Ryan used visual examples to remind me of the environmental challenges such as, moving subjects, light limitations and suspended particulate interference to ensure that I recognized the choices available to me to get the right shot. Once the presentation was finished I checked my camera and with a new cylinder hooked up I jumped into the water and the dive supervisor handed my camera to me.

Once I descended down the shot line Ryan gave me ample time to focus on getting the camera set up. After firing a few test shots I signaled to Ryan that I was ready and we steadily maneuvered to the bottom of the tank. One of the most important keys to successful aquarium photography is to be patient. Sharks and large fish are generally curious and so by waiting patiently in one spot you can pretty much guarantee that it is not too long before an inquisitive critter comes in for a closer look at you and your camera. If you chase your subject the chances are that you will not get your shot. It did not take long before one of the giant groupers came in for a close inspection. Taking into consideration the rules regarding flash photography shooting distances, I waited until the fish had moved off slightly and then took the photograph. While waiting for the next subject to come and check me out I looked around the rockwork and corals next to me and I didn't have to look too far to find another subject, a Wobbegong shark lying perfectly still hoping not to be seen. Eventually we moved to another section of the exhibit and as we waited patiently in our





**LET ME IN**

There are many great close up opportunities to be had with the cage dive experience.

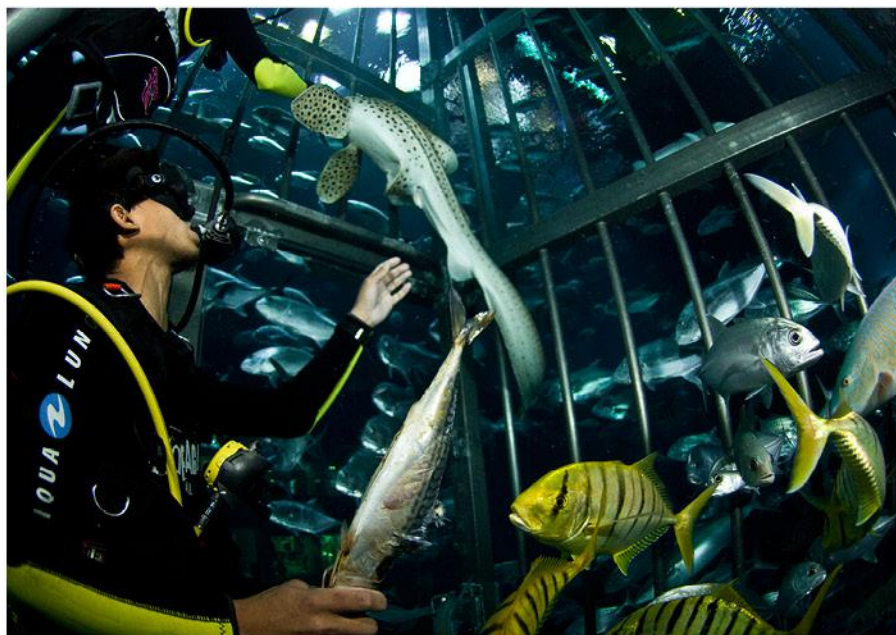


next spot; hammerheads, grey reef and nurse sharks all came into shooting range. Suddenly Ryan signaled and pointed upwards and as I looked up I saw hundreds of trevally circling the glass-bottomed boat while visitors inside it fed them from the surface. Making a quick visit to the dark cave full of sharks, I tried a few different options with strobe light, ISO, aperture and shutter speeds but as suspected my attempts were unsuccessful; it was just too dark to get the shot I wanted. Making my way to the surface I thought to myself that there was still one dive left and another opportunity to try and get the sand tiger shot that I was hoping for.

After a quick shower to warm me up I reflected on the previous dive and as I thought about my experiences I realized that this is one of the few laid back aquarium exhibit dives I had ever done. Most of the animals seemed totally relaxed with the presence of divers and this was most certainly down to the diving and feeding protocols set in place by the curatorial team. With the grand finale looming there was just 25 minutes of the third and final presentation to go before the cage dive – SHARK FEED!

With a combination of safety information from the first presentation and ways to achieve the best photographic results from the second, Ryan guided me through what to expect from my last dive. During this presentation he covered the introduction of shark ID photography and using an ID chart showing how each of the thirty-two sand tigers sharks had individual markings. With unique markings to each of these sharks, Ryan explained that the goal was to observe, photograph and note the number of fish consumed during the shark feed. At the end of the dive ID photographs taken would then be compared with their chart so that a log of the fish consumption could be made. Ryan also covered the importance of the regional dive community involvement in the up and coming Sharkwatch Arabia initiative. I thought that this concept was an excellent training tool and extremely beneficial to anyone attending the course showing how any diver can add to scientific research in the region. (read more on page 40 – Diving for a Cause).

Climbing down into the cage I couldn't help but think about Richard Dreyfuss as he climbed into that cage in the movie classic 'Jaws'. Armed with my camera I knelt on the clear acrylic base of the cage and as I positioned my strobes in the distance I noticed a large sand tiger surrounded by trevally heading directly for me. Swimming right up to the acrylic, the shark explored the surface with its nose, exposing its many rows of jagged teeth and while it passed by I took my photographs. Meanwhile a whirlwind of trevally had developed and as they circled the cage, other sharks attracted to the activity joined me. Looking down through the acrylic base of the cage I could see a large group of aquarium spectators staring up from the safety



## BRAVE CARPET SHARK

A young leopard shark slips inside the cage.

of their tunnel waiting for the shark feed to begin. After a short wait I am joined by the husbandry team and equipped with a bucket of fish, they bait their feeding poles stirring the fish into a frenzy. Out of nowhere a large six foot nurse shark joins us and as it surveyed the cage trying to work out how to get inside I continue to get great close up opportunities. Suddenly, appearing from behind the masses of trevally, a large sand tiger homes in on the bait and as it stops centimeters from the cage, the bait is offered and within a millisecond it is grabbed from the pole. Drawn in by the drama unfolding outside the cage, golden pilot fish take advantage of the opportunity and nip at the bait while we wait for the next shark to approach. Next to visit the cage is a young leopard shark and while we are all distracted by the crafty pilot fish trying to steal the bait, the young shark slips inside the cage hoping not to be noticed. Calmly the husbandry team direct the brave little carpet shark out of the cage and as the team send it on its way with a fish, I take more photographs and continue to enjoy the whole experience. It's not long before the husbandry team signal to me that the food is finished and as we all slowly ascend I can't help feel a tiny bit disappointed that the experience is over.

Back at the surface and as Ryan wraps up the specialty he mentions that there is an annual photographic competition and that I should submit my best photographs; I could win! With cameras rinsed, the team say goodbye and as I leave I mention that I will definitely be back soon.

Final thoughts – Being used to working with animals within an aquarium environment I am fully aware of the risks involved when introducing guests into a tank full of potentially dangerous marine creatures. However, this carefully managed program allows divers a privileged opportunity to dive safely in an



## A CLOSER INSPECTION

Attracted by activity the sharks come in very close to the cage.

amazing aquarium exhibit with the additional bonus of being able to photograph the creatures within it. As an experienced photographer I also found the program offered a great deal of useful information to ensure that I had the best guidance in order to take good underwater photographs within this aquarium. The most memorable part of this PADI specialty for me was the many close encounters I experienced in the shark cage and I will definitely try it again. The experience offers a totally new perspective to underwater photography within the UAE, which promotes shark conservation and teaches you how to take photo ID shots for scientific research within the region; this is an experience not to be missed.

For more information on the PADI Mall Aquarium Specialty contact Al Boom.

Tel: 04 342 2993

Email: [dives@thedubaiaquarium.com](mailto:dives@thedubaiaquarium.com)

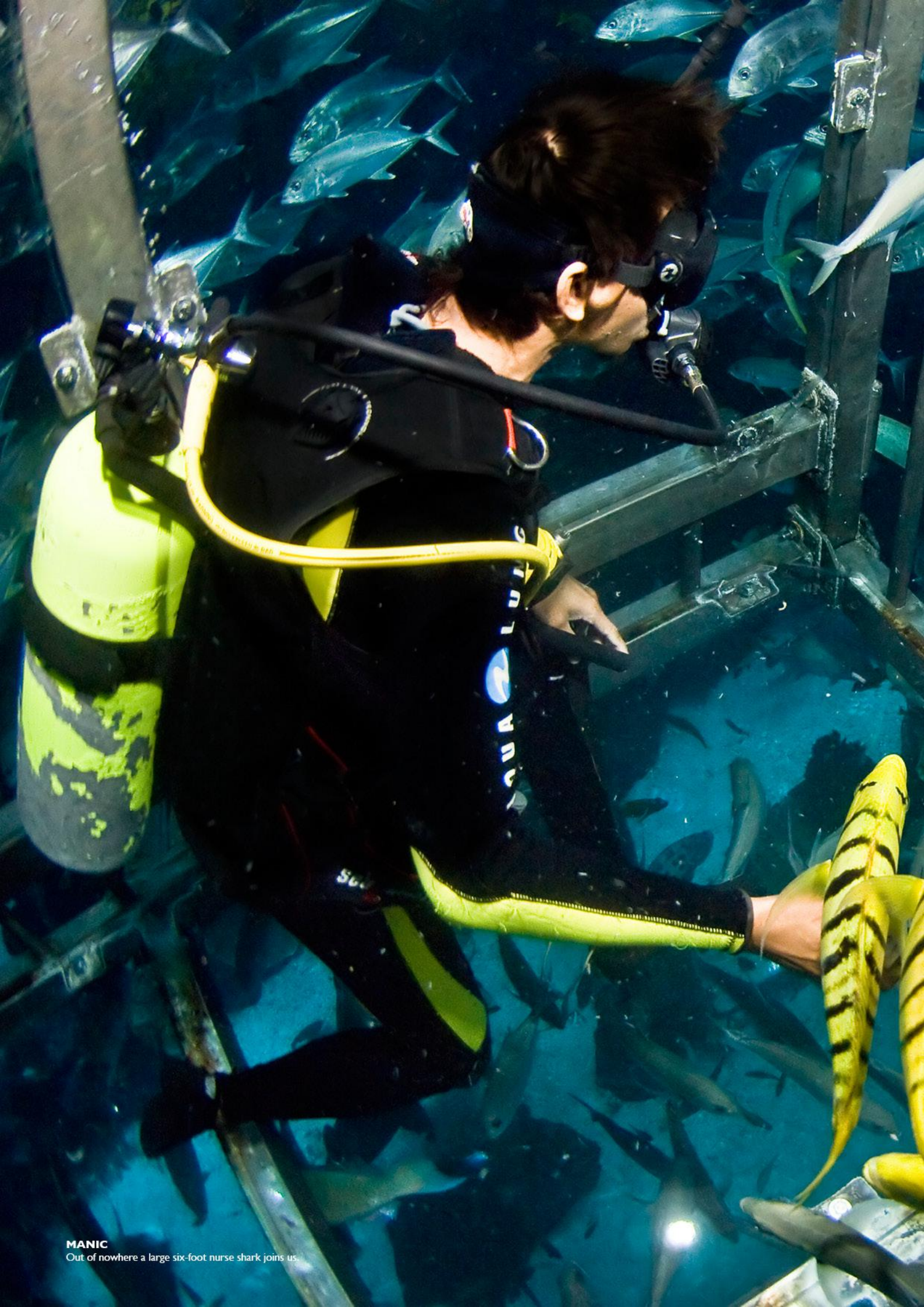


**THE GROUPER SHOT**

Waiting patiently is the key to getting your photograph.







**MANIC**

Out of nowhere a large six-foot nurse shark joins us.







# HEADACHES AND SCUBA DIVING

FEATURE **ASSER SALAMA (TDI/SDI/CMAS INSTRUCTOR)**

Diving headaches have spoilt many dive trips. As there are different causes associated with headaches and diving, it can be as simple as a mask squeeze, an excessive constriction around the neck by thermal protection, a dental issue, cold water around an inadequately insulated head, or saltwater aspiration. However, it can also be as complicated as a symptom of decompression sickness (DCS). Here are some common causes, preventions, and treatments for diving headaches.

## SINUS HEADACHE

A sinus headache is caused by a sinus squeeze during ascents or descents. The symptoms are pain in the forehead, pain in the face, or pain in the cheekbone area. A diving headache caused by a sinus squeeze is due to the failure in equalizing pressure. Another cause is the inflammation of the sinuses or nasal cavity due to allergies or cold. Remedies include slowing your ascents and descents or using decongestants. However, it's better not to dive if you are sick.

## TENSION HEADACHE

Symptoms of tension headaches are pain in the head and pain in the back of the neck. Tension headaches are caused by muscle strain due to anxiety and muscular rigidity. Clenching your jaw during the dive can also cause a tension headache. To prevent the development of muscle strain and consequently the tension headache, you must learn to relax in the water. Eventually you will stop getting this type of headache if you dive within your abilities, gain experience, and become comfortable in the water.

## MIGRAINE HEADACHE

Symptoms of migraine headaches include severe pain, visual changes, weakness or numbness of the arm, and nausea. Also post-dive vomiting is one of the migraine headache consequences, but if coupled with other symptoms could indicate a DCS hit. If the diver has a history of migraine headaches, there could be a direct correlation between diving and the onset of the cranial pressure.

Many of the medications used to treat migraines contain drugs which will increase the risk of nitrogen narcosis. However, as many people only have occasional migraine headaches, and others have migraines which are not incapacitating, migraines should be evaluated on a case-by-case basis. Anyone who suffers from migraine headaches and wishes to dive must consult a physician, preferably one with knowledge and experience in diving medicine.

## CARBON DIOXIDE TOXICITY HEADACHE

A dull pulsing head pain after diving is usually a symptom of this type of headache caused by carbon dioxide toxicity. This headache is caused by carbon dioxide build-up in the body. The increase in waste gas is usually due to hypoventilation (too little air intake). Hypoventilation usually happens when a diver doesn't take large enough breaths from his / her tank or doesn't breathe often. Simply put, not breathing enough to get rid of the carbon dioxide created in the body will eventually lead to this type of headache.

Carbon dioxide build-up is also caused by the usage of inefficient dive equipment, especially at depths below 30 meters (100 feet) where the gas density increases. This creates greater work of breathing, which leads to creating more carbon dioxide. Given that carbon dioxide is way more narcotic than nitrogen, sense dulling is a potential impact of excessive carbon dioxide build-up.

The best treatment here is to take slow, deep breaths to reduce the build-up. Also use high performance regulators with good flow characteristics. Carbon dioxide headaches don't respond well to pain relievers.

## DCS HEADACHE

Headaches can also be a sign of DCS. DCS is caused by the formation of bubbles as dissolved nitrogen comes out of the tissues on ascent. DCS can lead to permanent physical impairment or death. Seek immediate medical attention if a diver complains of a headache and has other signs of DCS such as joint pain, swelling, skin rash, itching, dizziness, nausea, vomiting, ringing in the ears, or extreme exhaustion. A SCUBA diver is at risk of DCS when he / she does not decompress after long or deep dives before surfacing, or when he / she ascends too quickly or makes a panic ascent.

## A WORD ABOUT DEHYDRATION

Dehydration is one of the most common problems, yet goes unrecognized. One of the first symptoms of dehydration is a headache accompanied by dizziness, ranging from mild to severe.

When the fluids go out of the body, the body will concentrate the rest of the fluids internally and peripheral flow is cut down. This in turn reduces the ability of the body to off-gas as the capillary exchange at the extremities became less efficient due to decreased circulation, which in turn invalidates all the decompression models. You may believe that you are off-gassing normally, whereas in reality, you are not. Watching your computer or following the tables won't help because the models are no longer valid. Also the blood flow to the brain is reduced due to dehydration, which results in reduced oxygen flow to the brain. Headache and dizziness occur accordingly.

When engaged in SCUBA diving, it is advisable to drink more than your normal intake of fluids and monitor your urine output for signs of adequate dilution (light-colored urine). Although this is a simple and universally accepted technique to determine whether humans are well hydrated or not, and it could be done in most cases, please note that there are some pathological conditions (diabetes for instance) that result in production of dilute urine. So aiming at having light-colored urine in certain rare cases could be a bad thing.



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Asser Salama is a mechanical power engineer, an MBA-degree holder, and a TDI / SDI / CMAS instructor. He teaches both recreational and technical diving courses, in addition to CPR, first aid, and different specialties including Solo Diver. He is currently working on the final revision of a book called Recreational SCUBA Diving Handbook. Asser is the current president of Red Sea Shadow, the largest online SCUBA diving community in Egypt. He also enjoys software development, and that's why he created an electronic diving logbook and image gallery called Rec Dive Log. Email Asser via [asser@red-sea-shadow.com](mailto:asser@red-sea-shadow.com).



# UPCOMING EVENTS

## WORLD ENVIRONMENT DAY

Saturday 5<sup>th</sup> June

## WORLD OCEANS DAY

Tuesday 8<sup>th</sup> June

## EDA SOCIAL EVENT

Thursday 24<sup>th</sup> June

## REEF CHECK TRAINING – ABU DHABI

Thursday 17<sup>th</sup>, Friday 18<sup>th</sup> and Saturday 17<sup>th</sup> June

## NEW EDA T-SHIRT DESIGNS

They're finally here and we have 5 T-Shirt designs for you to choose from.



## COVER PHOTO: BY HUSSAIN AL QALLAF

Grey reef shark at Sha'ab Rumi during the Sharkquest Arabia Initiative Sudan expedition.



### AVAILABILITY:

- MENS T-SHIRTS – Dhs 45  
Sizes: S, M, L, XL, XXL
- LADIES T-SHIRTS – Dhs 40  
Sizes: S, M, L, XL, XXL
- KIDS T-SHIRTS – Dhs 30  
Sizes: 3, 5, 7, 9



**Chairperson** Mr Faraj Butti Al Muhairbi

**Vice Chairperson** Mr Essa Al Ghurair

**The Secretary General** Mr Jamal Bu Hannad

**Financial Director** Mr. Khalfan Khalfan Al Mohiari

**Head of the Technical Committee** Mr. Omar Al Huraiz

**Head of the Scientific Committee** Mr. Mohd Al Salfa

**Technical Advisor** Mr. Ahmed bin Byat

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### MISSION STATEMENT

To conserve, protect and restore the U.A.E. marine resources by understanding and promoting the marine environment and promote environmental diving.

### LEGISLATION

Emirates Diving Association (EDA) was established by a Federal Decree, No. (23) for the year 1995 article No. (21) on 23/02/1995 and chose Dubai as its base. The Decree stipulates the following responsibilities for EDA.

- To Legislate and regulate all diving activities in the UAE.
- Ensure environmentally respectful diving practices in all EDA members.
- Promote and support the diving industry within the UAE by coordinating the efforts of the diving community.
- Promote diving safety in the commercial and recreational diving fields through standardization of practices.
- Promote and preserve historical aspects of diving within the gulf region and enhance environmental education to diving and non diving communities through EDA activities.

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# VOTE BU TINAH

AS ONE OF THE NEW 7 WONDERS OF NATURE

Off the western coastline of Abu Dhabi lies a unique wonder of nature, wild and undisturbed by human activity, known as Bu Tinah Island.

Imagine an island with shallow sparkling blue waters and sandy beaches, visited by critically endangered animals, musical with birdsong and remote from the bustle and noise of human habitation. Add colourful coral reefs and seven metre high mangrove trees to that picture and you'll start to get an idea of the peace and beauty of Bu Tinah Island.

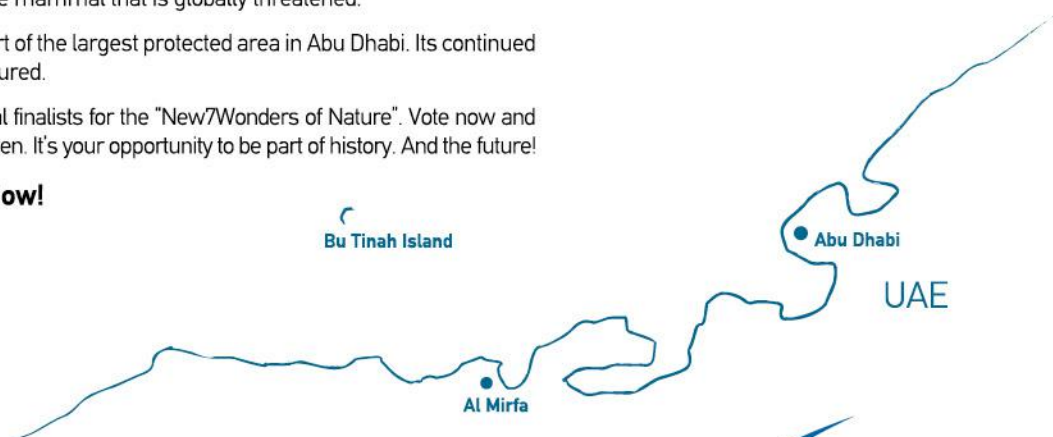
Bu Tinah's thriving habitat is a unique living laboratory, with key significance for climate change research. This distinctive natural habitat hosts rare and globally endangered marine life.

This distinctive natural habitat with its shallow waters, seagrass beds and tall mangroves, set amid extensive coral reefs, hosts rare, beautiful and globally endangered marine life. Seabirds such as the flamingo and the osprey, diverse species of dolphins, and the rare hawksbill turtle are to be found in Bu Tinah. The island's waters are also home to the planet's second-largest population of dugong, a large marine mammal that is globally threatened.

This precious natural resource is part of the largest protected area in Abu Dhabi. Its continued survival and protection must be ensured.

Bu Tinah Island is one of the 28 official finalists for the "New7Wonders of Nature". Vote now and bring Bu Tinah Island into the final seven. It's your opportunity to be part of history. And the future!

**Vote Bu Tinah Island. Vote Now!**



## VOTE by SMS!

Simply text **Bu Tinah** and send to **3888**

Each sms costs only 2 AED and you can vote as many times as you like.

[www.BuTinah.ae](http://www.BuTinah.ae)

60 EMIRATES DIVING ASSOCIATION, JUNE 2010



هيئة البيئة - أبوظبي  
Environment Agency - ABU DHABI