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# DIVERS FOR THE ENVIRONMENT

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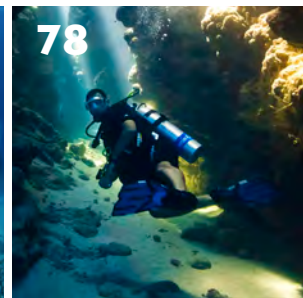
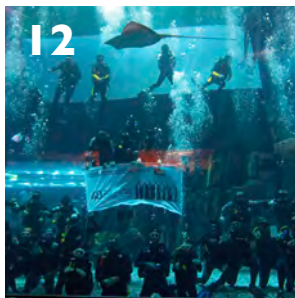
ABU DHABI, DUBAI, FUJAIRAH, OMAN, KUWAIT  
ANOTHER STEP TOWARD PROTECTING OUR ENVIRONMENT



*Dan Churchill's*  
**MARINEMAN**







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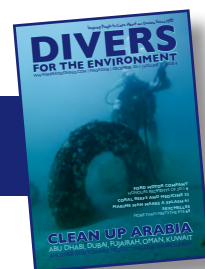
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### DIVERS FOR THE ENVIRONMENT

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 March 2012. Send all articles, feedback or comments to: [magazine@emiratesdiving.com](mailto:magazine@emiratesdiving.com)

### EDA COVER

PHOTO BY SIMONE CAPRODOSSI



Please recycle this magazine after you have read it.

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# SPIRIT OF THE UNION



**IBRAHIM N. AL-ZU'BI**  
EDA Executive Director

As we celebrate the 40<sup>th</sup> UAE National Day, we reflect on the spirit that ties us all together; the Spirit of the Union that enables millions of people to coexist and build lives together. The Spirit of the Union is derived from the vision and leadership of the Late Sheikh Zayed Bin Sultan Al Nahyan, EDA's founder; and now lives on through His Highness Sheikh Khalifa Bin Zayed Al Nahyan, President of the UAE and his fellow leaders of the nation's Emirates who are shaping the UAE's future.

It is the spirit that binds the cosmopolitan community of the UAE, connecting us under one banner, one flag. It is the spirit of the union that celebrates our culture and heritage, and yet also shapes our future. The Spirit needs to be celebrated and shared by all citizens and residents of the UAE.

For hundreds of years, Pearl diving was a main part of the UAE economy. Life in the Gulf was dominated by 'jewels of the sea'. For some, pearls brought fabulous wealth. For the men who harvested the pearl, it was more than an object of beauty; it was a way of life. For people with few resources on land, this jewel of the sea offered opportunity. Divers, rope haulers and captains would head to the Oyster beds for three to four months every summer with the most basic necessities. Divers worked

from sunrise to sunset, wearing only a nose clip, leather finger protectors, a stone weight and sometimes, a cotton suit to protect them from jellyfish. In one or two minutes, the diver would descend at least seven metres and put oysters in a basket before being hauled back to the surface. Pearls from the region were exported to India, Persia and Turkey and sold on to European and Chinese markets. The Gulf industry boomed with integration into global markets, particularly after the mid-18<sup>th</sup> century. As the demand for pearls increased, so did their value. By the mid-18<sup>th</sup> century, the high value led to trading centres being established in other places, even those with limited natural resources, such as Kuwait, Abu Dhabi, Dubai and Sharjah.

The demise of the natural pearl industry came at the hands of one man: in the late 19<sup>th</sup> century the owner of a small Japanese pearl oyster farm began to perfect the art of the cultured pearl. Instead of waiting for nature to take its course, Kokichi Mikimoto seeded the oysters with irritants to provoke the growth of pearls. It took him more than a decade to perfect the art, but by 1916 Japan started to flood the market with cultured pearls. By the 1930s, hundreds of Japanese farms were producing millions of pearls a year; cheap alternatives to the natural versions that were so hard and so expensive to harvest. It hit the Gulf hard. For those pearl divers who risked their lives to build the UAE economy we celebrate the spirit of the Union. We are proud to be part of this nation and we will always be. EDA celebrated the 40<sup>th</sup> National day this year with 24 EDA members and 16 divers from the Dubai Aquarium. The 40 divers dived in the aquarium with the UAE flag to mark the 40<sup>th</sup> anniversary of the UAE.

In this last issue of 2011's "Divers for the Environment", we have some very interesting articles for you. You can read about our Reef Check updates in the UAE and all over the world where divers make use of their underwater adventures and help protect the underwater world. You will also read about lots of initiatives from our dive centers and clubs promoting diving and organizing clean ups and fun dive activities.

Clean up Arabia 2011 was another great success this year: we had more than one thousand participants helping in the UAE, Qatar, Kuwait and Oman to clean our beaches and our dive sites. I would like to thank our Clean Up Arabia Patron HH Sheikh Hazza Bin Hamdan Bin Zayed Al Nahyan for his support and participation, our Clean Up sponsors Coca Cola and Dubai Duty Free for their generous support, our partners in UNEP, Environment Agency Abu Dhabi, Dibba Municipality and the UAE Ministry of Environment for their support and most importantly our EDA members for their dedication and passion to conserve our environment.

It is also my pleasure to welcome Dr. Barbara Karin Vela to the EDA team. Dr. Barbara will assist EDA in her capacity as a Diving Physician and will head our health and safety committee.

As we are coming close to ending the year 2011, I look back at all our events this year and the years before, at EDA's increasing active members and to all the discussions I've had with divers I met while diving in and outside the UAE. One thing is clear, all divers genuinely want to make a difference and protect the marine life! To put it in a simpler and probably more selfish way, we want to enjoy our dives! And without a healthy marine life, dives are boring, aren't they?

I would like to wish everyone a happy 40<sup>th</sup> UAE National Day. EDA will be celebrating the National Day by publishing another valuable pearl diving cultural book, "The Adventures of a Pearl Diving Trip". I also want to wish you all a Merry Christmas and a Happy New Year. I am looking forward to 2012, which I am sure will be as exciting, fun and rewarding as this year was.

"On land and in the sea, our fore-fathers lived and survived in this environment. They were able to do so because they recognised the need to conserve it, to take from it only what they needed to live, and to preserve it for succeeding generations".

The late Sheikh Zayed Bin Sultan Al Nahyan

*Ibrahim Al-Zu'bi*



**DR. BARBARA KARIN VELA**  
DIVING PHYSICIAN

Dr. Barbara Karin Vela works as a general practitioner in the Dubai London Specialty Hospital, but her passion for diving made her take up a special training and additional education at the Stellenbosch University to become a diving physician. Apart from diving for pleasure, she wants to raise the standards of safety during diving and her mission is to educate the divers in how to face all the health and physiological challenges of this wonderful sport.



## FORD MOTOR COMPANY HONOURS RECIPIENTS OF 2011 CONSERVATION AND ENVIRONMENTAL GRANTS

12 ENVIRONMENTAL PROJECTS FROM AROUND THE GCC, JORDAN AND LEBANON RECEIVE A TOTAL OF US\$100,000

**DUBAI, UAE, NOVEMBER 15, 2011** – Ford Middle East honoured the recipients of the 2011 Ford Motor Company Conservation and Environmental Grants, with 12 grassroots level projects receiving a total of US\$100,000 in an awards ceremony held in Dubai. The ceremony was attended by various environmental personalities and groups from the region.

This year, environmental education rings loud with most of the projects involving the youth in order to start early advocacies to protect the environment. School children as young as 10 years old have been involved and mobilised to be guardians of the environment in their own respective communities.

Hussein Murad, Ford Middle East's Director of Sales said, "Our winners for this year are doing a phenomenal job in raising awareness to protect the environment in their local communities. We are glad to be able to assist them to further their cause and mission. It is quite exemplary that most of the projects involve the youth who represent the future and will be able to pass on to their peers ways to conserve the environment. We hope to see more of these projects come to life year-on-year."

Ford Motor Company



**Conservation and Environmental Grants**

"We also thank UNESCO-Doha and HH Sheikh Abdul Aziz Bin Ali Al Nuaimi, who has graced the Ford Grants this year as Ambassador, for spreading the word about the Conservation and Environmental Grants, helping us reach out to the local community groups that need this type of support," added Murad.

Dr. Benno Boer, UNESCO's Ecological Sciences Advisor in the Arab Region said, "As one of the longest running and most commendable

programmes initiated by the private sector in the region, the Ford Motor Company Conservation and Environmental Grants have been quite instrumental in helping local groups and organisations continue with their projects and we thank them for their continued support. With our efforts combined, we can influence more communities to do their part in protecting the environment. This is a laudable effort during the United Nations Decade of Education for Sustainable Development (2005-2014), and the composition of the jury is a real contribution to gender equality, which is an over arching priority of UNESCO's."

This year's winners include projects saving coral reefs and protecting marine resources in Kuwait, Oman and the UAE, initiatives that engage communities to become eco-police in and protect natural resources in Lebanon, setting up community theaters to inculcate environmental awareness in Jordan, volunteerism to collect and segregate plastic waste in Kuwait, and many more.

"There is a dire need to educate and activate the communities to preserve the environment. An informed citizenry is our best instrument in fighting the rapid deterioration of the environment. It is truly laudable that the





recipients of the Ford Grants are passionately pursuing raising environmental awareness through education and example. We are all beneficiaries of the environment and we must do our part to protect our natural resources against further harm," said H.H. Sheikh Abdul Aziz Bin Ali Al Nuaimi, also known as The Green Sheikh, Ford Grants Ambassador.

The Ford Grants is part of the company's efforts to support grass-roots level initiatives that protect and preserve the environment and natural resources in the GCC and Levant countries, and has awarded a total of US\$1.2million to more than 140 projects since its inception in 2000.

Since the programme's global launch over a decade ago, Ford has awarded more than US\$2,000,000 in grants to over 300 high quality projects throughout the Asia Pacific, Caribbean, Central America, Middle East and Puerto Rico to further their environmental initiatives.

The GCC and Levant Chapter of the Ford Motor Company Conservation & Environmental Grants has seen support from various governmental and non-governmental environmental authorities including the World Wide Fund for Nature, the Emirates Wildlife Society, the Arab Forum for Environment & Development (AFED) and UNESCO.

This year's winners have been chosen by an independent panel of jurors consisting of academics, as well as experts from environmental ministries and agencies. The panel of judges, which has been carefully selected in association with UNESCO, based on geographical coverage, age and gender equality, looks for initiatives that demonstrate a well-defined sense of purpose, a commitment to maximizing available resources, and a reputation for meeting objectives and delivering planned programmes and services.

Each year, the Ford Grants make available a total of US\$100,000 to individuals, community and non-profit groups that have projects currently running in the areas of preservation of the natural environment, environmental education and conservation engineering. The programme is open to applicants from

Bahrain, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia and the United Arab Emirates.

For more information about the Ford Motor Company Conservation & Environmental Grants, supported by UNESCO, please visit [www.me.ford.com](http://www.me.ford.com).

## ABOUT FORD MOTOR COMPANY

Ford Motor Company, a global automotive industry leader based in Dearborn, Mich., manufactures or distributes automobiles across six continents. With about 166,000 employees and about 70 plants worldwide, the company's automotive brands include Ford and Lincoln. The company provides financial services through Ford Motor Credit Company. For more information regarding Ford's products, please visit [www.ford.com](http://www.ford.com).

Ford's history in the Middle East goes back to over 60 years. The company's local importer-dealers operate more than 100 facilities in the region and directly employ over 7,000 people, the majority of whom are Arab Nationals. For more information on Ford Middle East, please visit [www.me.ford.com](http://www.me.ford.com).

Ford Middle East is also a responsible corporate citizen in the region, with the Ford Motor Company Conservation & Environmental Grants, a grass-root level program that has offered US\$1.2 million in grants to over 140 Middle Eastern environmental projects since 2000. For more information on the Ford Grants please write to [fmegrant@ford.com](mailto:fmegrant@ford.com).



HH Sheikh Abdul Aziz Bin Ali Al Nuaimi and Hussein Murad of Ford Grant.



## The 2011 Ford Motor Company Conservation and Environmental Grants winners are:

### JORDAN

Royal Society for the Conservation of Nature  
**PROJECT:** Integrating Environmental Concepts into National Curricula and Supervisors/Teacher Training  
**GRANT:** \$10,000

Jordan Society for Environment Conservation  
**PROJECT:** Al Rusayfa Environmental Community Theatre  
**GRANT:** \$10,000

### KUWAIT

Kuwait Dive Team - Environmental Chapter  
**PROJECT:** Protecting Marine Life and Coral Reefs in Kuwait  
**GRANT:** \$10,000

Abdur Rahman Abdullah  
**PROJECT:** Ramadan Mosque recycling project  
**GRANT:** \$7,000

### LEBANON

Association for the Protection of Jabal Moussa (Jabal Moussa Biosphere Reserve)  
**PROJECT:** TREECON Conservation of natural resources in Jabal Moussa  
**GRANT:** \$3,000

Arc En Ciel  
**PROJECT:** "Bouchons Roulants" (Rolling Caps)  
**GRANT:** \$14,500

Dalia Kamil Al-Jawhary  
**PROJECT:** Twinning Traditional Successful Approach of water resources management in order to combat today's challenges in Natural Resources Management  
**GRANT:** \$5,000

Safadi Foundation  
**PROJECT:** Educational project "Our Environment, Our Responsibility"  
**GRANT:** \$9,000

### OMAN

Biosphere Expeditions  
**PROJECT:** Protecting the reefs of the Musandam peninsula through education & capacity-building (previous winner)  
**GRANT:** \$7,500

National Earth Secrets Oman / World Habitat Society (Germany)  
**PROJECT:** Geological Heritage of Oman  
**GRANT:** \$7,000

### UNITED ARAB EMIRATES

Emirates Diving Association  
**PROJECT:** The importance of grazers for healthy reefs in extreme environments  
**GRANT:** \$10,000

Biosphere Expeditions  
**PROJECT:** Arabian Oryx, Gordon's wildcat and other species of the Dubai Desert Conservation Reserve  
**GRANT:** \$7,000





Rossella Meloni accepting 2 grants for Biosphere Expeditions.



The Kuwait Dive Team accepting their grant and presenting Ford Grant with a plaque of appreciation and information pack.

## KUWAIT DIVE TEAM VISIT THE EDA OFFICES



**15 NOVEMBER 2011** The Kuwait Dive Team visited the EDA offices and presented the EDA team with a plaque of appreciation for our environmental efforts.

It was such an honour and a pleasure to have them visit us. Several group photos were taken and ideas for future collaborations were discussed. We look forward to many successful projects together in the near future.

Thanks Kuwait Dive Team!

## PROTECT YOUR OCEANS WITH CAREZONE!



Emirates Diving Association (EDA) is delighted to partner with CareZone to help raise awareness and funds for its campaign to protect coral reefs in the region.

A small but growing number of socially conscious residents are enjoying this innovative new way to support the causes they are passionate about. Ritesh Tilani, a Dubai resident and social entrepreneur, developed CareZone as an easy way for the UAE community to give back, while doing what they normally do.

CareZone is a mobile app that encourages you to support 'Brands that Care.' Each time you check-in or spend money at any of the outlets listed on CareZone, you collect 'Coins' which allow you to use half to redeem rewards and the other half to donate to charitable causes. With 14 cause initiatives already listed, including EDA, you are empowered to choose the cause that is closest to your heart.

With the strategic support of brands such as HSBC, users can now receive a higher incentive for their check-ins. "This is an incredible opportunity to give back to causes without spending any extra money out of your own pocket. We want to encourage residents to visit our 'Brands that Care' because these businesses are committed to giving back," commented Ritesh.

Are you fed up of constantly having to make arbitrary choices about where to have breakfast, lunch, dinner AND dessert? Change the way you choose where to nibble, sip and

devour that next meal – choose places that allow you to give back to a cause of your choice. Add a little spice and variety to dining in the UAE by browsing CareZone's partners. Search by proximity, and once you're there, check in and gobble away!

With popular brands such as The Pavilion, Shelter, Kitsch Cupcakes, Sweet Stuff, and Laura Ashley – we know you won't have to wait long to try it out!

With every cupcake that you buy at Kitsch, you can give 1 meal to the Horn of Africa. Can you think of a sweeter, more guilt-free way to enjoy dessert?

CareZone also has an Events category, so you can view a 'Calendar for Good' by seeing upcoming charitable events in the city. In addition to being a unique resource, the Events allow users to collect Coins by simply attending any charitable event!

For example, CareZone users that attended the EDA Clean Up Arabia events were able to "check-in for charity" to collect Coins and donate them to help save our precious coral reefs right away!

CareZone has launched on iOS devices for those with iPhones. Symbian, Blackberry, and Android applications are coming soon.

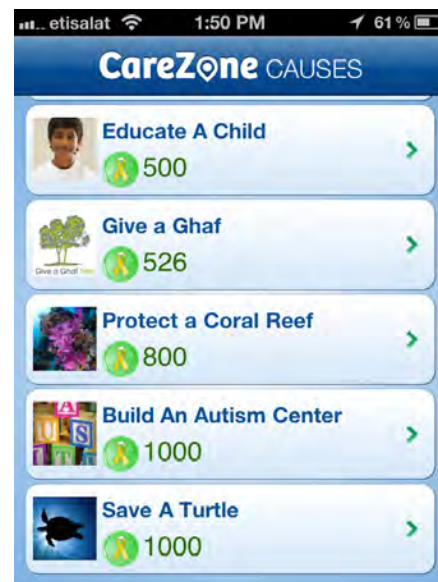
### START CARING TODAY!

To download the free app, or for more information, visit [www.care-zone.com](http://www.care-zone.com)

Like our Facebook page:

[www.facebook.com/CareZone](http://www.facebook.com/CareZone)

Follow us on Twitter @CareZone





# VOLUNTEER WORK WITH EDA



We couldn't print out our last issue of 2011 of the EDA magazine without giving out a big thank you to all the volunteers that have helped in our new coral reef project. The equilibrium on a healthy coral reef depends on different factors, one of them being the significant action of key species. Grazing fish and sea urchins are very important for the maintenance of healthy reefs, as their feeding removes fast-growing algae that competes with slow-growing corals for light and space.

During our dives, several transect tapes are laid down so we can perform a visual census of herbivorous fish and key macro-invertebrates. Benthic community diversity and percentage coverage is also assessed visually using photo quadrats that are taken at a fixed interval along the same transect lines. As you can imagine, not only is the number of equipment we need to use underwater tremendous, but the number of tasks that need to be done are also very time consuming especially when done by only two divers. That is why the help of our volunteers has been crucial for the positive outcome of our field work. Thanks to all of them we are able to count and measure fish and urchins as well as photograph our beautiful corals.

**A very special thank you to all of you that helped in this project throughout 2011:**

Belinda Grattan, Elie Habib, Edmund Escalant, Rania Mostafa, Fahad Al Awadi, Georgenes Cavalcante, Red Vargas, Gigit Vargas, Ian Trebinski and also special thanks to Michael Bernardo from NYU-AD.





# NEC BIRMINGHAM DIVE 2011

SATURDAY 22 AND SUNDAY 23 OCTOBER

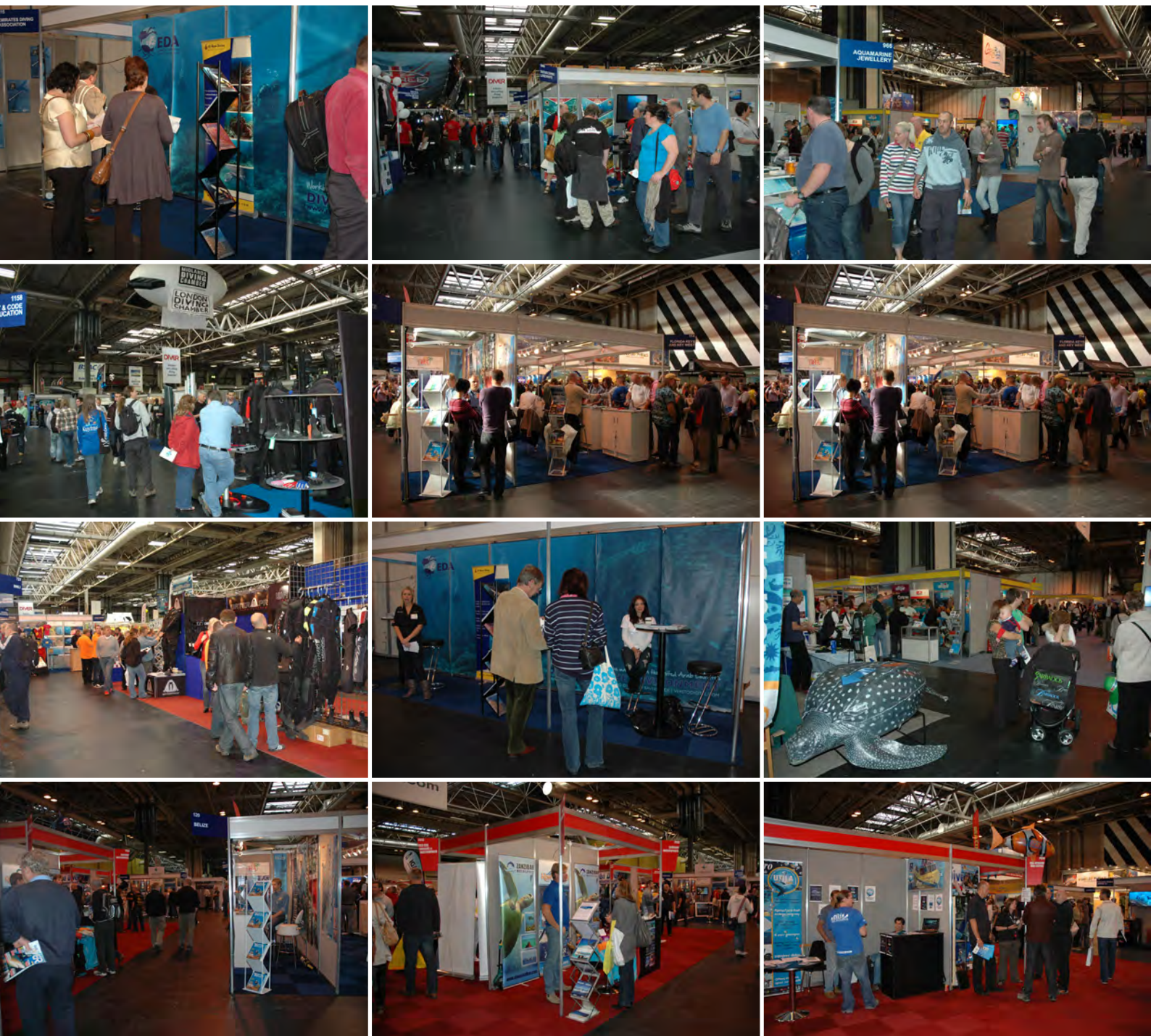
EDA took part in the UK's biggest and most popular festival for divers at the NEC Birmingham Dive Show on Saturday 22 - Sunday 23 October, acting as a platform for all the UAE dive centres who wanted to attend and introduce their businesses to the global markets. Al Boom Diving's Simon Tambling came on board and answered the many questions asked by the visitors about diving in the UAE.

300 exhibitors took part in the event offering the latest dive gear, holiday destinations, training and services.

Feature areas included the Try-Dive Pool, Technical Pool, British Isles Experience, the Caribbean Village and the New Dive Gear Display. There was also the PADI Village Diving Theatre which EDA was situated next

door to and the expanded Asia-Pacific Showcase. Two new attractions introduced to this year's show was the PhotoZone and the NoTanx 3D Freedive Simulator.

There was also a line-up of some of the diving world's most exciting speakers making daily presentations as well as other guest speakers in various locations of the show. Andrea Marshall, the best-known manta diver on the planet was there, as was film-maker John Boyl who showed new footage about the weird and wonderful creatures of Lembeh Strait. Jack Ingle talked about wreck diving in Malta and Mark Powell, a technical diver did his presentation on solo diving. Kevin Gurr investigated myths regarding rebreathers and Mack S House described underwater CSI.

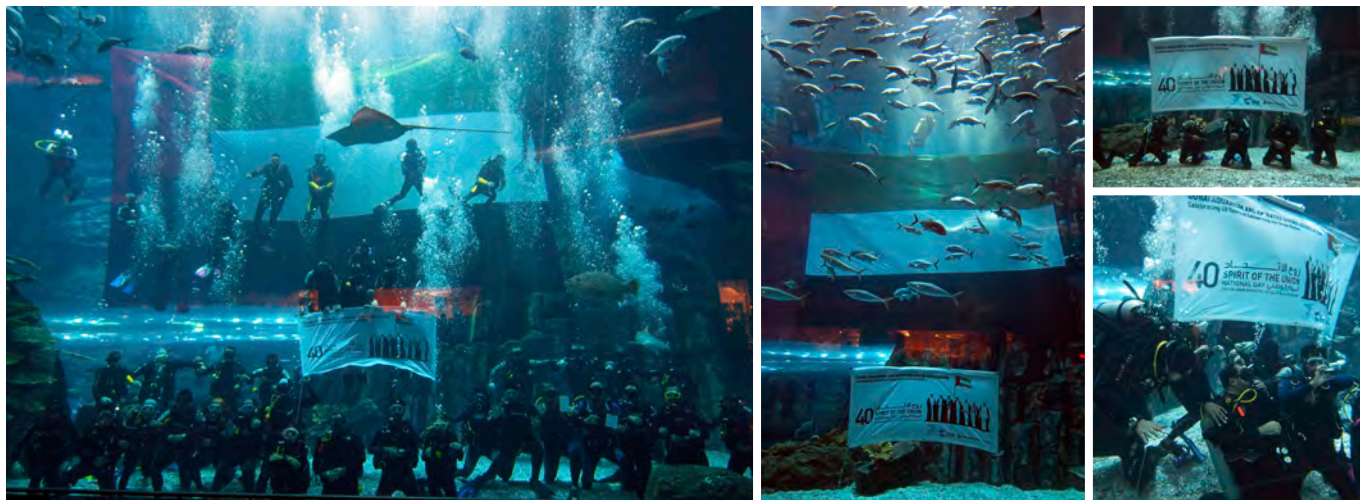








## EMAAR RETAIL MARKS 40<sup>TH</sup> UAE NATIONAL DAY WITH ACTIVITIES CELEBRATING ALL FOUR PILLARS OF THE 'SPIRIT OF THE UNION' PHOTOGRAPHY ALLY LANDES



Emaar Retail LLC, the premium provider of leisure and retail experiences, is marking the 40<sup>th</sup> UAE National Day with a roster of innovative activities that mark the four pillars of 'The Spirit of the Union,' the theme of this year's celebrations.

All the five key leisure destinations of Emaar Retail – Dubai Aquarium & Underwater Zoo; KidZania®, Dubai Ice Rink, Reel Cinemas and SEGA Republic – are hosting varied and colourful activities aimed at promoting the spirit of solidarity and unity that mark the National Day celebrations. These leisure destinations will also be adorned with UAE national flags and huge drapes in addition to special themed activities.

Mr Arif Amiri, Chief Executive Officer, Emaar Retail LLC, said: "The 40<sup>th</sup> UAE National Day celebrations this year pay rich tribute to the UAE's heritage as well as the commendable progress achieved under its leadership.

"The celebrations also mark the cosmopolitan community living in the country, a testament to the welcoming hospitality and open door policy of the nation to create an environment of growth for people from all over the world.

"This 'Spirit of the Union' prevails through the various activities at the leisure attractions of Emaar Retail. Through the activities we are further highlighting the achievements of the nation to visitors from all over the world."

Flagging off Emaar Retail's celebrations, Dubai Aquarium & Underwater Zoo, a must-visit tourist attraction in The Dubai Mall, will unfurl the UAE national flag – one of the largest ever in an aquarium environment on Sunday, November 27<sup>th</sup>. The flag will be displayed through Dec. 2, the UAE National Day.

To highlight the impressive achievements in

environmental conservation, a passion of late His Highness Sheikh Zayed Bin Sultan Al Nahyan, the Father of the Nation, Dubai Aquarium will host a total of 40 divers from Dubai Aquarium & Underwater Zoo, Al Boom Diving and Emirates Diving Association (EDA) to unveil a banner in the aquarium applauding the UAE's eco-conservation efforts. The banner will be unveiled on Wednesday, November 30<sup>th</sup> from 7 to 9pm.

Dubai Aquarium & Underwater Zoo will host an assortment of activities including henna painting, face painting, falcon display and a traditional Majlis from December 1<sup>st</sup> to 3<sup>rd</sup>, in addition to traditional sweet distribution to visitors.

The region's first of its kind children's edutainment centre, KidZania® will celebrate the Spirit of the Union through activities for the little ones from November 27<sup>th</sup> to December 4<sup>th</sup> reflecting the four pillars of the celebratory theme. Apart from being decorated with the national flag colours and the various establishments hosting UAE-themed activities such as talk shows and reporting on the UAE, KidZania® will host a jigsaw puzzle game. In another key activity that highlights the history of the nation, children can participate in a game where they are to arrange old photographs of each of the seven Emirates.

To celebrate 'The Spirit of the Union's' third pillar of 'cosmopolitan community,' children visiting KidZania® can engage in a specially planned leisure-cum-learning activity whereby they have to match the salutary greeting in different parts of the world against the respective nation.

Finally, to mark the emphasis of the celebration this year on the future of the nation, young KidZanians can write a letter or draw an idea to the nation's leaders with one new idea that benefits the country. The letter must be

dropped in the special 'Future of UAE' box, and will be presented in a KidZania®-branded book.

KidZania® will also host special Emirati-themed fashion shows. Young visitors can also write a poem or song using the words 'Dubai', '40' and 'Spirit of the Union,' and perform them at the Talent Show.

Children will get a sticker 'I was there for UAE's 40<sup>th</sup> National Day celebrations in KidZania®' and every child visiting the destination on December 2<sup>nd</sup> will get an additional 40 KidZos, the currency of KidZania®. The UAE national flag will be hoisted at the Main Plaza of KidZania®, accompanied by Al Youla dance performances. In addition to these special activities, various activity establishments will also take part in the the UAE National Day celebrations.

Dubai Ice Rink, the Olympic sized ice-rink; and SEGA Republic, the largest of its kind indoor theme park – both in The Dubai Mall – will host an array of UAE National Day themed activities. At Dubai Ice Rink, a large UAE National Flag will be unfurled and miniflags will be distributed to all visitors.

SEGA Republic will set up a 'Celebration Wall' where visitors can pin up flags of their nations or design and decorate their own flags, marking the cosmopolitan community living in harmony in the UAE. Other activities include a traditional majlis, henna painting and sweet distribution.

Reel Cinemas, managed by Emaar Retail, will wear a festive look during the UAE National Day celebrations. Children who come dressed up in the national dress or in the colours of the flag will receive special National Day gifts. Social media enthusiasts can post photographs of old Dubai on Reel Cinemas Facebook page, write about what they like about Dubai and what they miss about the city from the past.



## EDA IS NOW AN EARTH CHARTER AFFILIATE

The Earth Charter International – ECI Secretariat warmly welcome the newest affiliate of the Earth Charter Initiative: Emirates Diving Association (EDA).

The Earth Charter Initiative is a diverse, global network of people, organizations, and institutions that participate in promoting and implementing the values and principles of the Earth Charter. We invite all members of EDA to read the Earth Charter, which is a declaration of ethical principles for sustainability that can help as inspiration for more sustainable lifestyles, and also as framework for companies' codes of ethics, or projects that intend to promote sustainable ways of production and consumption. It is the

result of the most participatory process ever associated with an international declaration, which sought to identify those values that we as humans share and which are important to build more sustainable, just and peaceful societies. You can read about the Earth Charter at: [www.earthcharter.org](http://www.earthcharter.org)

There are over 100 affiliates of the Earth Charter in more than 70 countries, in addition to youth groups and volunteers who are trying to bring changes towards sustainability in their communities, work places, education institutions and in general, in their sphere of action.

EDA is the first EC Initiative affiliate in the

UAE, it expects to use the Earth Charter as inspiration for their activities. EDA is a member of the Earth Charter Middle East and North Africa network, which started to take form last year in November 2010, after the 10<sup>th</sup> anniversary celebration of the Earth Charter in Jordan.



## AL MAHARA DIVING CENTER'S SUCCESSFUL PADI IE CANDIDATES PASS THE INSTRUCTOR EXAMINATION FEATURE **KATHLEEN RUSSELL, PADI COURSE DIRECTOR** (AL MAHARA DIVING CENTER, ABU DHABI)



After a gruelling PADI Instructor Development Course (IDC) training program, 4 intrepid IDC candidates from Al Mahara Diving Center attended the PADI Instructor Examination (IE) in Dubai in October 2011. The PADI IE is a 2 day evaluative process, conducted by PADI Instructor Examiners flown from the PADI area offices. The areas of examination are followed by a 1.5 hour dive theory exam and a 1.5 hour standards exam (must score 75% or higher to pass), knowledge development teaching presentation, confined water teaching presentation, confined water 5 skills demonstration, open water teaching presentation and rescue demonstration.

Congratulations to Todd Weidmont, Suaad Al Harthi, Ryan de Beer and Andrew White for an outstanding performance at the PADI Instructor Examination.

Al Mahara Diving Center is a PADI 5 Star Instructor Development Dive Center specialising in instructor development programs in Abu Dhabi.



For more information on PADI GoPro programs, please contact us:  
Tel: +971 2 643 7377  
Email: [info@divemahara.com](mailto:info@divemahara.com)

## DIVERS NEEDED

## GHOST NET REMOVAL EXERCISE FEATURE **DARREN DREWERY**

Calling all Advanced Open Water Divers and above. After a recent excursion to the M/V Jasim, Al Mahara divers encountered excessive amounts of ghost nets entangled on the boats wreckage. The M/V Jasim is a popular dive site in Abu Dhabi so the risk to not only the divers that dive on the wreck but also the natural inhabitants of the wreck is greatly increased by the nets left by careless fishermen.

I would like to organize a Ghost Net Removal Exercise on the 30<sup>th</sup> December to try and rid ourselves of this unnecessary risk to divers and to the local aquatic life.

If you are interested in this worthy exercise, please email Darren on: [info@divemahara.com](mailto:info@divemahara.com) or call on

**+971 56 160 6748**

help us make this beautiful dive site even more spectacular... keep bubbling!

**Darren Drewery, PADI OWSI**



## INTER-CONTINENTAL HOTEL GROUP ABU DHABI

UNDERWATER CLEAN UP  
FEATURE **KATHLEEN RUSSELL**  
(EDA ABU DHABI COMMITTEE COORDINATOR)



Again volunteers armed themselves with gloves, trash bags, scuba gear and kayaks to clear up another area of Abu Dhabi. About 50 divers and kayakers participated in the Inter-Continental Hotel Abu Dhabi Underwater Clean Up on the 8<sup>th</sup> October 2011.

Special thanks goes to the Inter-Continental Hotel Abu Dhabi and Emirates Diving Association, Environment Agency of Abu Dhabi, EDA, Al Mahara Diving Center and the Center for Waste Management of Abu Dhabi. Over 600 volunteers came out from ADGAS, ZADCO, ADMA, GASCO, NYUAD and other schools came out to support the event.

Interesting items included a huge satellite disc, 4 plastic deck chairs and a table, lots of plastic beverage bottles and a few glass bottles and plastic and steel buckets and lots of lines with crabs entangled in them. We managed to save about 30 crabs entangled in the nets.

Keep the sea clean!

## ADGAS ABU DHABI ISLANDS CLEAN UP

FEATURE **KATHLEEN RUSSELL**, EDA ABU DHABI COMMITTEE COORDINATOR



Tis the season for beach and underwater clean ups in Abu Dhabi, from September all the way through to December this year. We really have passionate sea lovers living in Abu Dhabi who always find time and make a huge effort to come out to the underwater and beach clean ups and we applaud them for their dedication and commitment in keeping our oceans clean and healthy!

It is amazing to see the committed volunteers who attended the ADGAS Abu Dhabi Islands Clean Up event held on 17<sup>th</sup> September 2011. This event was partnered with Environment Agency of Abu Dhabi, EDA, Al Mahara Diving Center and the Center for Waste Management of Abu Dhabi. Over 600 volunteers came out from ADGAS, ZADCO, ADMA, GASCO, NYUAD and other schools came out to support the event.

Over 400kg of trash was picked up from Abu Dhabi International Sports Club Marina area and Lulu Island beach adjacent to the Abu Dhabi Corniche. Much of the marine debris were cans, bottles, plastic food containers and plastic bags littered across the beach. Inside the water, divers pulled up shopping carts, construction materials and plenty of beverage bottles and cans.

This event highlights the need for the community to take action and clean up our beaches and waterways and to send a clear message that we are all responsible to keep our marine environment clean and healthy. During the briefing, organizers highlighted the detrimental effects of marine debris left in the water and how marine life can be harmed by entanglement or ingestion of plastics.

All volunteers were encouraged to bring their own reusable water bottles and hydration stations were available to refill their bottles. Thank you again to all the volunteers who came to support cleaning up Abu Dhabi Island.









# OCEANS 13

## UNIQUE CALENDAR CELEBRATES THE OCEANS



Cover shot by Mark Carwardine

A high profile project to celebrate the oceans and draw attention to urgent marine conservation issues has united 13 of the most celebrated, award-winning, underwater photographers in the world.

Inspired by the UK shark and marine conservation charity, Bite-Back, and its campaigns to halt the trade and consumption of threatened fish, each photographer has donated a breathtaking image along with individual commentary on the exploitation of the marine environment to create a unique, limited edition, 2012 calendar.

Featuring high definition underwater images from around the world including sharks, manta rays, turtles, marlin, stingrays, hairy frogfish and coral seascape, the calendar showcases the remarkable beauty beneath the waves while first hand insights from the photographers highlight key issues challenging the oceans, including over-fishing, pollution and tourism.

So far Bite-Back's campaigns have succeeded in inspiring six of Britain's major supermarket chains to remove vulnerable fish species including shark, swordfish, marlin and monkfish from stores. It also recently prompted the UK's last major retailer of shark meat, MAKRO, to halt its trade and it continues to work tirelessly to motivate Chinese restaurants to remove the controversial dish, shark fin soup, from menus.

Worldwide, it is estimated that 73 million sharks are killed every year. Significantly, the lucrative trade in shark fins is a prime contributor to this marine holocaust. Left unchallenged this relentless slaughter could see 20 species of shark wiped out in the next five years.

Adventurer, survival expert and Bite-Back supporter, Bear Grylls, said: "The insane cruelty inflicted on sharks just for their fins is totally wrong. Sharks matter to our oceans and marine life. Lose the sharks and the oceans will rot."

According to Bite-Back, the beautiful images in the calendar are the perfect illustration of what's at stake. Campaign director, Graham Buckingham, said: "The reason that big predators such as shark, swordfish and marlin are at the forefront of an underwater genocide is because we've unthinkingly put them there."

"These fish are the lions, tigers and leopards of the marine world, yet few people stop to consider that fish remain the only truly wild commodity you can buy in a supermarket or restaurant. Over-fishing has a direct relationship with over-consumption and we can no longer expect exotic fish to be mainstays on fish counters and menus without becoming part of the demise of the oceans ourselves."

In September it was announced that some sharks could hold the cure for yellow fever along with hepatitis B, C and D yet there's fear among conservation groups that over-fishing will "kill the goose that lays the golden egg."

It is a sentiment echoed by legendary photographer, David Doubilet. He said: "As photographers we are all on the front lines of a war to protect our oceans for future generations. Each of us professionally approaches our subjects differently but the message we deliver to humanity is the same. As our oceans go so do we."

Bite-Back plans for funds raised from the sale of the calendar to help finance its campaigns and motivate a change in fortune for the oceans by encouraging consumers to reconsider the fish they buy and for retailers to rethink the fish they sell.

In a perfect endorsement of its work, Mark Carwardine, co-presenter of 'Last Chance to See' with Stephen Fry, said: "Bite-Back is running some remarkable and genuinely effective campaigns to halt the trade and consumption of sharks and other vulnerable fish species. Its purposeful and intelligent approach is achieving some astonishing results in the UK and inspiring thousands of supporters around the world."

The 2012 Bite-Back calendar costs £7.99 and is available online at [www.bite-back.com](http://www.bite-back.com).

### FURTHER INFORMATION

Call Graham Buckingham at Bite-Back on +33 7810 45 42 66

Email [graham@bite-back.com](mailto:graham@bite-back.com)



Photo by David Fleetham, Manta Ray, Hawaii



Photo by Adam Broadbent, Hawksbill Turtle, Maldives

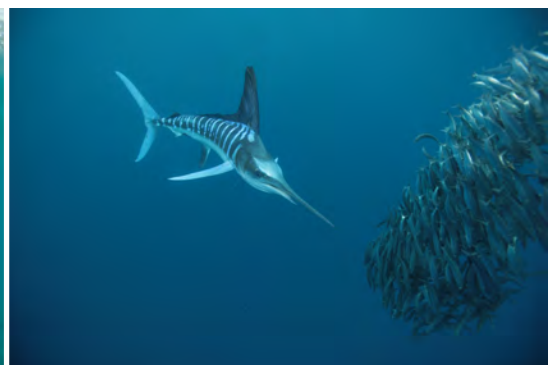


Photo by Amos Nachoum, Striped Marlin, Mexico



# NEW AWARE SHARK CONSERVATION DIVER DISTINCTIVE SPECIALTY COURSE



**AWARE Shark**  
Conservation Diver Distinctive Specialty Course

**Sharks in Peril**  
Divers to the rescue

Many of the world's sharks are on the brink of extinction.

Project AWARE's new **AWARE Shark Conservation Diver course** teaches you about shark species, their vital role in the ocean and how to rescue them.

Take this course and give sharks a fighting chance.

Protecting Our Ocean Planet - One Dive at a Time

Visit [projectaware.org](http://projectaware.org) or contact your PADI Dive Centre

**PROJECT AWARE**

Sharks are in danger – from us. Across the globe human activities are driving many shark species to extinction but divers have the power to stop this from happening. We are amongst the shark's few friends. You can join shark advocates around the world and help save our shark friends.

This is the message of a new course from Project AWARE called the AWARE Shark Conservation Diver Distinctive Specialty Course. This course is for anyone who wants to know more about the conservation of sharks; for divers who have drifted hypnotised as a magnificent shark swims by; for people who care about the ocean and want to help protect it; and for those who want to know more about how our activities on land and at sea can affect sharks. In short this course is for everyone.

One of the most alarming messages from the course is how close we are to emptying the oceans of sharks. Of 1044 sharks and rays that have been assessed, 30% were found to be Threatened or Near Threatened with extinction. One third of pelagic (open ocean) sharks and rays are now threatened with extinction and some shark species have

who? It is us, divers who see the real sharks: their grace and power; the electricity that runs across a reef when they are around. No diver who has seen a magnificent shark swim by can be left unmoved by the experience. Can we stand by and watch as the ocean is emptied of sharks? No, instead we can rally to their defense and become champions for shark protection. This course shows you how your voice, the diver's voice, can help the sharks.

Somehow the ocean would be smaller without sharks. Something vital will have been removed that is part of the mystique that drives us divers back in time and again to explore the ocean's mysteries. Sharks need divers to come to their rescue. This course shows you how.

## HOW DOES IT BENEFIT DIVERS?

The AWARE Shark Conservation Diver Distinctive Specialty Course has been written to be accessible to everyone. You can complete this course as a dive specialty that counts

towards your Master Scuba Diver rating and you can be certified whether or not you see sharks on your dives.

Overfishing is the biggest cause of this dramatic plummet in shark populations. And the biggest driver to catch sharks is to supply the shark fin soup trade. Sadly many sharks are killed only for their fins; their body dumped overboard.

Why should we care if the ocean is emptied of sharks? As you will learn during this course, sharks maintain a balance between other species in marine ecosystems. Reefs with a healthy shark population contain a greater number of other species that are bigger than those found on reefs with few sharks.

If divers do not rally to protect the sharks, then

towards your Master Scuba Diver rating and you can be certified whether or not you see sharks on your dives.

During training dives you will identify features of a dive location that may harm sharks and features that have the potential to reduce impacts on sharks. This course will open your eyes to the knock on effect of human activities and developments on land and at sea. After taking this course you will look at every dive site through different eyes.

This course is also highly recommended for non-divers who can complete the knowledge development as a stand alone course. As it becomes clear during this course, everyone can help reduce impacts on sharks and everyone has a voice in calling for greater protection for sharks.

## HOW DOES IT BENEFIT SHARKS?

Sharks need help. They need it from us and they need it urgently. Complete the AWARE Shark Conservation Course and start an important journey to becoming a passionate shark defender who takes action to protect sharks. Take this course and give sharks a fighting chance.

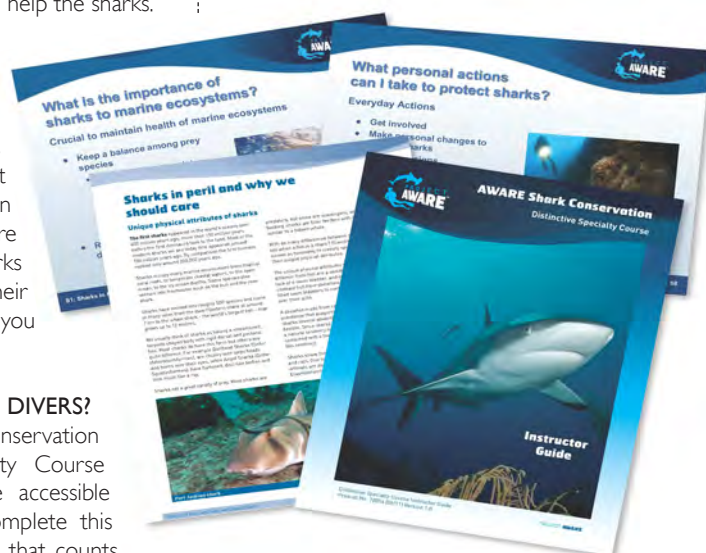
AWARE Shark Conservation Diver Distinctive Specialty Course at a Glance

## PREREQUISITES FOR DIVE CERTIFICATION

- Certified as a PADI (Junior) Open Water Diver or equivalent
- Be 12 years of age or older

## DIVE REQUIREMENTS

- Two open water training dives (certification can be given if no sharks are seen)





## INDOOR CONSERVATION

FEATURE **ANDREW ROUGHTON**



Like many scuba enthusiasts, I began 2011 with the resolve to dive more and drink less. Now that the year draws to a close I can confidently say that I've achieved the former. This is partly thanks to personal dedication and partly thanks to the accessibility of good diving in the Emirates.

However, like many Dubai residents, lack of time, the unpredictability of West Coast diving, and the distance to the East Coast often combine to make a good, quick dive quite a challenging find. Therefore, earlier this year I decided to try a series of three speciality dives in the Dubai Mall Aquarium.

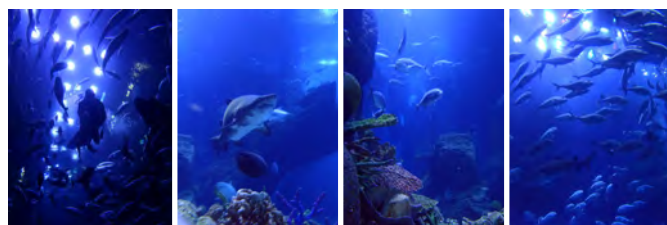
Like most divers, I was initially – and still am – attracted to the sport by its escapist value. That is, the opportunity to disappear into a world seemingly untouched by humans, to watch weird and wonderful creatures doing weird and wonderful things, and the chance to spend up to an hour completely away from all of the trappings of modern human life grants scuba its unrelenting appeal. Therefore, diving in an oversized fishbowl with an audience of shoppers and tourists seems like an oddly contradictory pursuit.

However, the opportunity to feed over ninety sharks from the reassuring safety of a cage, dive with – and photograph – a menagerie of marine life, and learn about shark identification and conservation makes this series of speciality dives well worth the visit. The waving shoppers create a unique experience rather than an unwelcomed distraction and the endless visibility provides a wonderful alternative to many West Coast dives, which offer little more than the view of your buddy's fins!

Moreover, if you scratch the surface, Dubai Mall Aquarium is far more than another tacky tourist attraction. It allows marine biologists to study thousands of different species in their quest to preserve aquatic life, it has an ocean school, which teaches students about the value of marine life and the aquatic world, and promotes shark conservation by dispelling the image of sharks as ruthless predators.

Therefore, if time is an issue, the summer sun is too much to bear, or you'd just like to try something different, this series of three speciality dives with AI Boom is both entertaining and educational.

**CALL** AI Boom Diving on 04 342 2993 or  
**EMAIL** [dives@thedubaiaquarium.com](mailto:dives@thedubaiaquarium.com)



## MEET MARMO



**He's a little octopus with a big heart. He enjoys long swims in the sea and playing with friends. He's energetic, curious and brave and loves asking questions and helping others.**

Marmo always helps his parents with chores around the house. He likes to sweep his ocean floor and bake clams with mom – and he always cleans his room when asked.

But lately, those small tasks are hard. Marmo's room is always cluttered with trash (he can hardly keep up with it, and he has eight arms!) and his friends are having similar troubles.

Something is very wrong with the ocean, and Marmo wants to make it better. He knows that even the smallest task can make a big difference (cleaning your room, sharing with friends, and recycling, too) and he wants people and sea creatures around the world to help him. He thinks that if we all chip in, we can make the ocean better for everyone.

And we have a hunch that this little octopus is onto something very big.

**FULL NAME** | Marmo Octopus Rubescens

**BIRTHDAY** | August 8, 2008

**PLACE OF HATCH** | Baja California

**RESIDENCE** | His parents' ocean pad

**DREAM JOB** | Ocean preservationist or maybe an astronaut

**ENJOYS** | Swimming in the sea, helping others, juggling mollusks, karate, discovering new places, learning new things, and making new friends

**DISLIKES** | Cleaning his room, homework, sharks and fishing nets

**FRIENDS** | Junior, Celine, and Rocco

Marmo is the face of PUMA's newly-launched youth ocean conservation campaign and joins the PUMA Volvo Ocean Racing team in their



intrepid adventure as the mascot and 13<sup>th</sup> crew member: Marmo, a strong, smart sea creature, draws his identity from PUMA's boat, the magnificent Mar Mostro.

Marmo will star in an illustrated children's book – "Marmo Saves Our Seas" – created by PUMA to educate children and their families about the importance of preserving the wonders of the oceans. Marmo tells the story in a way that is captivating, fun and easily understandable for young children. He explains what small changes we can make in our lives – like giving up plastic bags – to better the world's oceans and aquatic life. The book will be available in six different languages (English, French, Spanish, Mandarin, Arabic and Portuguese).

As the Mar Mostro makes its epic journey around the world in the 2011-2012 Volvo Ocean Race (VOR), Marmo will be featured in an online marine conservation education programme, relaying his experiences at [www.puma.com](http://www.puma.com). Children and their families will be able to track Marmo's adventure with the PUMA boat crew, learning about marine issues, habitats and sea creatures along the race route. Educational games and quizzes about ocean conservation will also be available online.

Marmo will spend time with children and their families at each VOR stopover port. He will make guest appearances at the PUMA Quad in Race Village, as well as local aquariums and schools for story-time readings of his book. Marmo will host a range of fun, ocean conservation education games and activities for young children, and will lead events to encourage recycling drives and beach clean-ups.

Finally, young Marmo fans can bring their favourite aquatic superhero with them through an exclusive capsule children's collection made from sustainable materials:



**MARMO T-SHIRT:** Inspired by the octopus design on the keel of the Mar Mostro boat – the Marmo t-shirt features a fun wrap-around design, giving kids an eight-tentacle "monster" hug as they ride along with Marmo. Kids will also love the glow-in-the-dark Marmo eyes to help lead them through a make believe, dark ocean floor. The t-shirt is made from 100% recycled cotton jersey and is available in size small through to extra large.

**MARMO RAIN PONCHO:** Now kids can look like a real octopus – from head to (eight flowing) legs – in the Marmo-inspired rain poncho made from 100% recycled polyester, and featuring a hood for added protection from outdoor elements.

**MARMO BACKPACK:** Eight legs can carry a lot of gear! For on-the-go fun, the Marmo backpack, with a zip-up mouth and eight swaying legs, will come in handy for storing kids' favourite things. The backpack is sustainable and is developed using an environmentally-friendly, safe and healthy process.

**MARMO BUCKET HAT:** For breathable sun protection, this cotton twill bucket hat with Marmo eyes will keep kids covered – rain or shine.

**KREECHR SANDAL:** Young explorers are certain to encounter some tough terrain – maybe even come upon a sea monster or two. The Kreechr sandal is designed for almost any adventure, and has a comfortable footbed and rubber outsole. The sandal design is inspired by the Mar Mostro; it even has padded "monster eyes."

**MARMO TOY:** After the race, kids can take their pal Marmo home with them as a reminder of all the important environmental lessons they have learnt. The Marmo toy is also 100% recyclable and safety tested for young children.

**Marmo will be at the PUMA QUAD in the Volvo Ocean Race Village in Abu Dhabi everyday for storytime and children's activities from January 1<sup>st</sup>-15<sup>th</sup>, 2012.**





## FSDC INDUCTION OF OFFICERS FOR 2011-2012

FEATURE **EDU ALVIO**



The new officers of the Filipino SCUBA Divers Club (FSDC) – UAE took their oath of office last September in the presence of distinguished guests and partners.

The momentous affair was held at the Four Points Downtown Hotel in Dubai. The induction was officiated by Hon. Benito Valeriano, Consul General of the Philippine Consulate. Also gracing the occasion were Ibrahim N. Al-Zu'bi and Reema Al Abbas, both of Emirates Diving Association, and Stevie Macleod of Scuba Dubai.

In his message during the ceremony, Hon. Valeriano acknowledged the contribution of FSDC to the Filipino community and the unwavering support of FSDC's two closest partners: EDA and Scuba Dubai.

EDA has been the club's conduit to the larger diving community within the UAE, and a resource for its varied dive concerns. In mutual support, FSDC actively participates in EDA activities, notably in marine conservation and environmental issues such as the annual Clean Up Arabia, Reef Checks, seminars, trainings, and various social events.

### The officers of FSDC for 2011/12 are as follows:

- Tina Vitug – Chairman
- Jhun Matias – Dive Officer 1
- John Sincioco – Dive Officer 2
- Jason Lim – Dive Officer 3
- Maria Reza Maagma – Secretary
- Maribel Delos Reyes – Asst. Secretary
- Corinne Carpentero Hajilo – Treasurer
- Alelie Sumaoang – Asst. Treasurer
- Allan Dy Co – Auditor
- Jove Vilorio – Asst. Auditor
- Troy Maagma – PRO
- Ramon Bernad – Dive Jack 1
- Edu Alivio – Dive Jack 2

As a token of gratitude and courtesy, Tina Vitug, FSDC's new Chairman, presented Hon. Valeriano with an honorary membership to the Club. She also recognized the tireless service of the Consul General to the Filipino community, now numbering 500,000 in the UAE.

Tina expressed optimism and enthusiasm for the year ahead for FSDC, no doubt with the

participation of its hundred-plus members, and the solid support of its partners.

A sumptuous buffet lunch at the hotel's restaurant in the lobby followed the short induction ceremony with the usual fun, laughter, and camaraderie so typical of FSDC members.

### ABOUT FSDC

The Filipino Scuba Divers Club – UAE is a sports club registered under the auspices of the Philippine Consulate Dubai. The club is open to Filipino and non-Filipino divers residing in the UAE.

Established in 1994, FSDC through its motto, "Dive for Good Health", aims to promote physical fitness and wellness among its members. The club is likewise committed to marine conservation and environmental concerns.

FSDC takes part in local and international Scuba Diving trips. Organized fun dives are regularly arranged for the enjoyment of its members. Furthermore, PADI courses are offered in the club, ranging from entry to professional level plus the entire range of specialty courses, through FSDC's official instructors.

FSDC respects and honors the integrity of its partners and sponsors and this commitment is demonstrated by organizing projects worthy of their patronage and support.



L-R: Joe Acosta, Tina Vitug, Reema Al Abbas, Hon. Benito Valeriano and Ibrahim N. Al-Zu'bi



L-R: Tina Vitug, Stevie Macleod, Joe Acosta and Hon. Benito Valeriano



# DISCOVERING SCUBA DIVING

FEATURE **EDU ALIVIO**



It is with some dread and sluggishness that I set off from home on that one early morning drive towards Jumeirah Beach Road. The night before, I attended a pre-orientation meeting with the Filipino Scuba Divers Club. And now, I am on my way to my first ever Discover Scuba Diving session. It's in the middle of summer and the early morning humidity seems like steam blowing out of my ears. I park near the beach road and slyly walk towards the FSDC tent where quite a few number of new wannabe divers started to gather.

The DSD team is so convivial and before I could settle my timorous self, I am lucky to be part of the first group to be in the water. A friendly diver hastily whisks me to choose a colorful mask and snorkel, then the correct diving booties and fins, and then up to the right size of BCD along with the heavy weight belt needed to weigh me down. It is suffice to say, five minutes later, I'm already standing by the shoreline ready to plunge in all my diving gear.

It feels uncanny the very first time. The bulky and heavy cylinder tank hanging on my back, tightly held by a velcro clip on the BCD I'm wearing, the oversized mask that encloses my nose, and the dangling snorkel attached to the left side make me wonder about their purpose underwater. The hulked blue fins fitted on my diving booties get me limping on the stride from the shoreline towards the deeper part of the water where I'll be joining a group of other eager and excited wannabes to learn and try the awesome sport of scuba diving.

Getting to know and listen attentively to the dive instructor along with my new divemates is enjoyable and a bit of fun at the start. But

easing down into the water is eerie and as my face slowly slips below the water's surface after the downward hand signal is made, a little bit of dread creeps in. Slowly inhaling from the mouth regulator is a bit odd to start with, but the breathable and continuous air flow from the cylinder comes with a reassuring hiss, and for the very first time, I breathe underwater! It is startling and amazing at the same time.

Moments pass and everything is transformed from carrying all the heavy gear to being light and supple. The mask instantaneously fits snugly onto my face and it clears out so easily, along with the comfortable mouth regulator that serves as my steadfast lifeline to the surface air.

With that first underwater breath I've had, a magical door opens to a different world. Not a world apart, but totally different in the real sense. The freedom, the excitement and the thrill I've felt at that very moment is priceless.

That was exactly a year ago. Going through that magical door, my life has never been the same again. My discovery-driven and adventurous soul, along with my love of nature, has brought me to new and enlivening heights.

Seeing things most people never see and go where most people never go: the pristine coral reefs, the abundance and diversity of the marine world, the awe and tranquility of being just an arm length away from some wrecked and sunken ship. Scuba diving never ceases to give me new challenges.

Reflecting back aboard a dive boat as it speeds back home from one of our dives, would I dive again? Absolutely!

Exhilarating, exciting and fun, with no two dives the same and endless seas to discover. There's always something novel to see, somewhere different to explore, and some new way for me to enjoy the experience. Discovering scuba diving never stops and I ultimately grow along with it.

The Filipino Scuba Divers Club – UAE organizes regular Discover Scuba Diving sessions for Filipinos and non-Filipinos alike.

FSDC's DSDs are conducted by FSDC's friendly, experienced and PADI-certified instructors.

For more details, contact:  
[fscd.dubai@yahoo.com](mailto:fscd.dubai@yahoo.com)





## ATLANTIS DIVE CENTRE PHOTOGRAPHY CLUB



Underwater Photography Club Zainab 07.10.11



Photo by Vladimir Radnic

Near the end of 2010, Jason, Warren and I (Vladimir) had a conversation about what we can offer to the UAE's underwater photographers. We wanted to create something new and exciting. The idea was born to organize an Atlantis Dive Centre Underwater Photography Club!

January of this year, we had our first get together and were overwhelmed with the response. It gave us an extra boost to push the club and organize more and more interesting events.

The idea of the club is to get like-minded divers / photographers together to share our passion and learn from each other. Whatever level photographer or diver you are, you are welcome to the photography club. The club is just about having fun and it does not matter

which Dive Centre you dive through either and it is FREE to join!!!

Today our club has more than 60 members and that number is rising with every meeting.

A great success story is avid diver Nicola Bush, who in January this year first started her diving career and her underwater photography. You should now see the amazing pictures she takes each weekend.

Each meeting we ask divers to bring their best 6 pictures and if they want some advice, the likes of Warren, Alistair and Gordon will help advise them on improving their skills. So a huge thank you to Warren, Alistair and Gordon who have become so actively involved in the club and giving up their free time to jump in the pools to help the club's avid photographers become the photographers they are today.

2011 has been a great year for the club with trips to Oman, the East Coast and diving the wrecks of Dubai. 2012 is going to be even better.

Our next expedition to Salalah is on February 9<sup>th</sup> 2012. We are taking an expedition to dive some of the unspoilt dive sites of the Indian Ocean! Please contact the Dive Centre if you would like to join us.

A great compliment to the club has also been our invitation from the organizers of the famous Belgrade Underwater Film Festival to organize an underwater photography exhibition during their upcoming festival in December.

Big thanks to everyone and hope to see you in 2012 for some more great pictures.

## NEW YEAR IN THE MUSDANDAM

Stuck on what to do this New Year or not so keen on spending oodles of money to enjoy it?

Atlantis Dive Centre is spending it in the Musandam if you are keen to join. We depart on the 30<sup>th</sup> of December and will be back on the 1<sup>st</sup> of January.

Jason is running the trip with Jodie and Ernesto. So I can guarantee you lots of laughs and fun diving. I am going to be taking the rebreathers along so if any of you would like to complete your PADI Rebreather dives whilst in the Musandam, let me know. What a great way to bring in the New Year.



## SUCCESS AT THE PADI INSTRUCTOR EXAMINATION



**Huge congratulations to Sandra, Winlove, Tim, Tony, Michel and Dyter who in October successfully became PADI Instructors.**

Good Luck to the remaining IDC candidates who due to work could not make this IE but are going to Maldives and Egypt to do it.

2011 has been a great year for the Atlantis Dive Centre's professional programs. Having had candidates attend 5 IE's in total throughout the year and everyone passing with flying colours is a great credit to their hard work and the work of our Course Director and Staff Instructors I have at the Atlantis Dive Centre.

Well done everyone, very proud of you all and have fun teaching.



## SEAL TEAM DIVERS ROCK



All I know is I wish I had started my diving when I was as young as 8! My guys at the Atlantis Dive Centre have informed me PADI had not been invented when I was 8!!!

I have to thank Jodie, Stuart, Kirsten, Jack, Joe, Vladimir, Ernesto and Kerry instructors at the Atlantis Dive Centre. They have made the Seal Team program so much fun for the young Seal Team divers. For you Mums and Dads out there, I can't imagine how proud you are of your children.

So to all the PADI Seal Team divers and the Master Seal Team divers, well done guys and girls, an incredible achievement.

The after school activity has been a real hit with the Master Seal Team divers with them having been busy completing their speciality dives, diving in our pools at night, diving along our submerged submarine.



## PROJECT AWARE/CLEAN UP ARABIA

Huge, huge THANK YOU, to everyone who volunteered their time this year to join us in the Project AWARE and the EDA Clean Up Arabia. Throughout the year, we have run 4 underwater clean ups. Not only having a lot of fun but you all have really made an impact on making the dive sites safe for the marine life and all scuba divers. You have also raised a lot of money for Project AWARE, so again I thank you for that.

In 2011 we have been working with Captain Ali who has a huge passion for protecting the dive sites. You will often see him on his days off diving to remove old discarded fishing pots. The picture of the old pots is all Captain Ali's work.

The biggest tasks I think we had, were removing the huge nets off the Zainab and SMB. When I first dived the Zainab to see the net on it, I honestly thought we could not remove it in one day. But we did it!



## MASTER SCUBA DIVER CHALLENGE

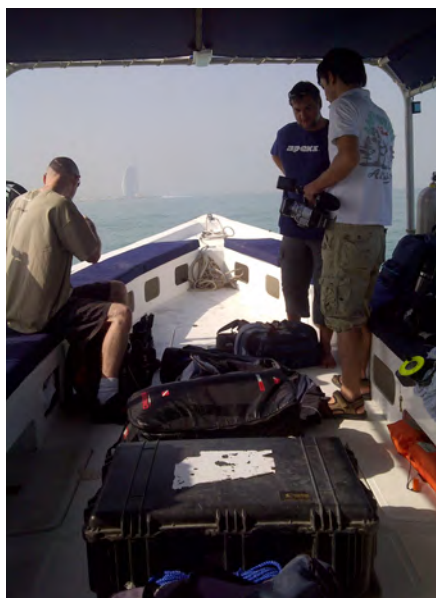
At the start of 2010 Atlantis Dive Centre started the PADI Master Scuba Diver Challenge. Well done to everyone who completed the challenge and also to those logging their 50<sup>th</sup> dives. It has been a lot of fun.

We are in the Musandam for the New Year and will put all your names in the hat to see who has won the Challenge. AED 10,000 in prizes, so what a great start to the New Year.

Also, a huge congratulations to everyone who took part in the 'Big 5'. Diving the best dive sites in the Arabian Gulf. More challenges to come for 2012.



# THE BLACK KEY CHALLENGE



On the 5<sup>th</sup> of October, divers from Al Boom Diving, together with geocachers, located the Black Key Challenge just off the Dubai coast 10m underwater. Unfound since 2007, this was an exciting find given the difficulty of the cache and the dive skill required.

**So what exactly is geocaching and why was this an exciting find?**

## GEOCACHING

Geocaching is an outdoor sporting activity in which the participants use a GPS and other navigational techniques to hide and seek containers, called "geocaches" or "caches", anywhere in the world.

A typical cache is a small waterproof container containing a logbook where the geocacher enters the date they found it and signs it with their established code name, and trinkets of little value. Geocaching is often described as a "game of high-tech hide and seek".

Geocaches are currently placed in over 100 countries around the world. After 10 years of activity, there are over 1,532,000 active geocaches hidden with over 5 million geocachers searching for them worldwide.

## DESERT CHALLENGE

The Desert Challenge comprises a number of caches hidden around the UAE, mostly in desert locations. One of the caches is however underwater; meaning that to find it, you would have to add scuba diving skills to the normal skills required.

Listed on the geocaching website, the Black Key Challenge is described as follows: "This cache is located in ten metres of water very close to a frequently dived wreck, just off the Dubai coastline. You will need to be a suitably

qualified scuba diver with a dive buddy and possess the appropriate equipment to find this. You will also need to get to the site by boat; it is too far to swim from shore.

It is not a difficult dive but, given that the underwater visibility is just a couple of metres, this will test your skills as a "search and recovery" diver. There is also a noticeable current running at mid tide".

## PLANNING THE EXPEDITION

The idea in looking for the Black Key Challenge was brought to Al Boom Diving by one of the dive centers' independent PADI Assistant Instructors, Geoff Braden.

"It seemed like an obvious combination of hobbies," said Geoff, "to combine the fun of geocaching with those needed in diving – and to introduce the two groups of enthusiasts".

News of the planned geocaching expedition soon reached Zaid Adham, of Treasure Hunters, a television programme dedicated to covering geocaching adventures in the UAE. "My own medical history didn't help me with getting a diving permit so we had to pool our resources together to get this one: professional geocacher meets professional divers!"

## A FIRST ATTEMPT

The first dive trip hosted by Al Boom Diving to look for the cache was sadly unsuccessful with a team comprising of Geoff Braden, as expedition leader, together with divers, Scott Guinan and Samantha Joffe going out to find the co-ordinates but sadly not the cache. "Visibility was very poor and although the location description fitted that of a popular well-dived wreck site, the co-ordinates did not match."

## A SECOND ATTEMPT

A follow-up dive was planned and went out on the 5<sup>th</sup> of October; this time combining the skills of the professional geocacher with those of the professional divers. Al Boom Diving PADI Course Director, Mohamed Helmy, together with PADI Instructors Youssef Hassoun and Samantha Joffe headed out with geocacher Zaid Adham.

Following the GPS co-

ordinates exactly, the dive boat anchored at the site to allow the divers to continue the search underwater:

"Visibility was again not good at all," said Mohamed, "and we had to make use of all of our skills of search and recovery using lines, reels, and a lift bag underwater. The cache was certainly not easy to recover, and earned its 5/5 difficulty rating."

"Al Boom Diving was kind enough to leave a voucher for a free dive in Musandam for the next person to make the find!" commented Zaid.

"Treasure Hunters (<http://www.facebook.com/TreasureHunters>) will be chronicling the prep and journey to this find for one of its episodes, to be broadcast in about 2 weeks on satellite TV. Make sure to tune in on YouTube to find the episode once it airs (if you're not in the region).

What a day! What an experience! What an achievement! What a cache!"

To get into geocaching as a sport, visit [www.geocaching.com](http://www.geocaching.com) and watch Treasure Hunters on DMTV.

To become a certified PADI scuba-diver, or to improve your dive skills, contact Al Boom Diving on [abdiving@emirates.net.ae](mailto:abdiving@emirates.net.ae).





## DUBAI NIGHTLIFE UNDERWATER



Explore the nightlife of Dubai, underwater!

For a relaxing end to the day, join the divers from Al Boom Diving for a night dive on Jumeriah Beach every Wednesday from 5:30pm to 8:30pm.

"Not only is this a great social activity and relaxed way to end the day," says Mohammed Helmy, PADI Course Director at Al Boom Diving, "but it is also a great alternative to the gym!"

The PADI Advanced Open Water certification, or higher, is needed to go night diving, but it does open up a whole new world of diving. The colors of the reef, the sleeping fish, and calm environment of the ocean at night make for exciting diving.

From their dive centre on Al Wasl Road, the Al Boom Diving bus will take divers, and dive kit to the beach where the night dive takes place.

"We dive for around 45 minutes following the small reef off Jumeriah Beach," says Mohammed. "There are special procedures and signals to be used when night diving, but divers learn all of this in the PADI Advanced Open Water course."

The night dive is Dhs150 including tank and weights or Dhs250 including dive kit, with dive torches available for rent at Dhs100.

Book for a night dive with the Al Boom Diving call centre on +971 4 342 2993 or email [abdiving@emirates.net.ae](mailto:abdiving@emirates.net.ae).

## SCHOOL TRAINING – AL BOOM DIVING TEAMS UP WITH A NUMBER OF LOCAL SCHOOLS TO OFFER TRAINING TO STUDENTS

FEATURE ARJUN DHAWAN, REPTON SCHOOL

The underwater world always fascinated me, and I've always wanted to be able to swim in the ocean alongside whales or dolphins and take photos of the marine life. But when it came down to getting our forms signed, I was having second thoughts. Nevertheless, I decided to go for it, and give it a shot.

In the open water course which I and all beginners at this school have taken, we learnt how to be able to swim in water up to a depth of 10-15 metres without having an instructor with us all the time. The course covers all the areas of being able to scuba dive, from the use of the equipment to emergency escapes to predicting sea patterns and weather conditions for good dives.

As a beginner, we are required to complete 4 pool dives, which we did at the Al Boom Diving Centre. We then had 2 assessed open water dives, one which we did in Fujairah. Alongside all of this, we were also required to complete certain theory online to completely understand what we aimed to achieve out of our pool and open water dives.

This ECA is not only fun, but challenging too. It does require a lot of work, but it's the satisfaction of being able to enter a whole new world and discovering the environment. That's our motivation.





## JOHN HOWARD OF BUBBLE N SQUEAK DIVING REVIEWS THE CRESSI LEONARDO AND THE APEX QUANTUM DIVE COMPUTERS

### CRESSI LEONARDO

This is a chunky looking entry level dive computer that has all the basic functions that a good dive computer should have. It is easy to use and activates on contact with the water. Setting the computer up before diving to your personal requirements only takes a few minutes. In reality it is very intuitive and the manual is almost superfluous.



What I really liked about this computer, apart from its incredible low price is its sturdiness. The pins that secure the strap to the computer are really chunky and reassuring. The display has big easy-to-read characters that tell you exactly what you need to know clearly without clutter. Right up front it tells you the maximum depth for your dive based on the EAN mix. You don't have to search for it.

The log function is basic but adequate with only two displays giving you all of the stored data for the dive. Nothing fancy but all the necessary basics.

What I was not so keen on is the single button for navigating your way through the menu. At times I found this frustrating in having to scroll through a complete sequence to get where I needed to go. An example of this is then you are changing the EAN %. If you are going from EAN 36% to EAN 32 you cannot go down but find yourself going all the way through to EAN 50% and Air to get to what should have been 4 clicks away. The same is true when you are scrolling through the log of dives. You can only go down (or let it time out to take you back to the most recent dive.)

This computer keeps the EAN % that was set until it is changed by the user. However as the initial screen reminds the diver in big bold numbers what the % mix is, the risk of performing an air dive on an EAN setting is significantly reduced. I personally prefer this to the process where the computer automatically rests to air after a given time.

The plan function is adequate but only allows you to increase the planned depth in 3m steps and will not take into account a planned surface interval.

Overall this is a great value dive computer which will give the diver all the basic information in a readily available manner. It should appeal to any diver who wants a basic dive computer and does not want it to double up as a regular time piece. It also has a great function for dive centres looking for a computer for hiring out to divers. It has a reset process allowing the instructor or centre to reset the computer to ZERO even if it is still showing a desaturation in progress.

### APEX QUANTUM X

Whilst not an attractive computer; (It sits a bit too high for my

liking) this computer has an impressive range of functions including a compass with a direction set facility. It looks and feels like a dive computer but the all-important pins used to attach the computer to the wrist strap are standard watch pins and didn't give me confidence.

The instructions are comprehensive and you need to spend about an hour getting to know the functions and setting the computer up before you use it. Having three buttons, it is relatively easy to scroll your way through the 9 modes. Unfortunately you cannot scroll back making it a little annoying when you pass the menu you want.

The display is easy to read with big characters for the need-to-know now information but I found some of the additional information too small so that you had to rely on knowing what the little flashing icon on the bottom left of the screen was or get the magnifying glass out!

The compass feature is excellent with a set button and mark to give a directional and reciprocal heading. The compass works well at inclined angles, even when held at 45 degrees. Again the set and actual heading are very clearly displayed.

The dive setting process is easy with the exception of the nitrox settings. The computer allows you to set three different O<sub>2</sub> % for three different tanks. This is for switching DURING the dive. I find this a little strange when the computer will not handle trimix. I feel that this feature will be wasted on the vast majority of divers. One little annoyance is that you can only go up from 22% through 99% to get back to air even though you can do this by holding the required button down. Given this limitation it might have been better to have designed the Nitrox facility to be able to set the O<sub>2</sub> % for successive single tank dives rather than the in-dive switch.

The PLAN feature is standard but like many other computers does not allow you to schedule in a surface interval and strangely only allows you to plan the dive with the 1<sup>st</sup> tank nitrox setting. (So why have three tank settings to allow you to switch tanks?)

The logbook and history are all standard with a good graphical display of the dive profile.

The reset button is also a great feature for the dive shops who want to rent out computers but I feel that this computer is priced a little too high and might be a little too complex for that market.

Overall this computer has some good functions, particularly the compass, but it seems to fit in no man's land being in-between a basic model and the more sophisticated competitors that can handle trimix. It is well priced and gives value for money for the diver who wants a dive computer with a compass.

### So which computer is right for you?

Personally I feel that the Cressi Leonardo gives great value for money as an all-purpose basic computer but shame about the single button. Ideal for dive shops to rent out.

**Want a good compass built into your computer?**

Go for the Apex Quantum X.





## THE LIQUIVISION XEN AND XEO: REVOLUTIONIZING THE WAY YOU DIVE

FEATURE **EVA LANGE, LIQUIVISION PRODUCTS, INC.**



Liquivision Products, known for its innovative line of technical OLED dive computers have recently released two revolutionary new computers which outperform their competitors once again.

- **THE LIQUIVISION XEO:** an affordable, color OLED, multi-gas dive computer developed to serve divers of all levels.
- **THE LIQUIVISION XEN:** the world's first color OLED bottom timer featuring a revolutionary balance of performance and value.

The Liquivision Xeo Trimix/CCR Computer is the only dive computer you will ever need. If you are a recreational diver, just starting your diving career or if you are an experienced technical diver the Xeo is made for you. It offers air, nitrox, trimix and CCR capabilities that you can progress with throughout your diving career. The Xeo is compact yet readable and can be dove virtually out-of-the-box as it comes preloaded with the Buhlmann ZH-L16C algorithm, with optional Gradient Factors.

The Liquivision Xen Bottom Timer is geared towards gauge only divers or those who want an affordable, easy-to-read back up to their dive computer. With its color OLED display, resettable stopwatch with seconds, its resettable average depth and lifetime dive log memory, the Xen is the most advanced bottom timer on the market which is still very affordable. Finally divers will no longer need to buy an expensive full-blown dive computer only to put it into gauge mode right out of the box.

In addition to that the Xen and the Xeo both feature Liquivision's patented tap-interface which makes it easy to navigate through the intuitive menus – no need any more to memorize multiple button sequences. Another incredibly valuable feature of the Xeo and the Xen is their bright full-color OLED display with huge fonts offering maximum readability. When diving you will never have to shine a light on your computer again to read the display because the OLED display actually emits light! In addition to that the patent pending robust ceramic pressure sensor offers superior reliability when you are at depth.

Interested customers and dealers can find more information at [www.liquivision.com](http://www.liquivision.com).



## SHARKWATCH ARABIA DATABASE UPDATE: RE-SIGHTINGS!

FEATURE **DAVID P. ROBINSON, JONATHAN ALI KHAN & WARREN BAVERSTOCK**



What a quarter it has been for whale shark sightings in the Musandam! We have logged many new individuals into the database and continued to get re-sightings too. The quality of images coming for ID purposes is getting better and better as awareness about the correct way to ID a whale shark increases. October was a very busy month with two re-sightings and 10 new sharks added to the database.

The sightings have now reduced, which is very similar to last year in November and I think the sharks may now be few and far between until the warmer months return, but you never know. Please keep the encounters coming in, even if you don't have a photo, simply recording the time and place of the encounter also helps.

We would like to take this opportunity to thank the following individuals and companies for their support and for sending in sightings to Sharkwatch Arabia: Al Marsa Musandam, Steve Jenkins, Alison McKenzie, Tamer Bou Karoum, Julian Palmer, Steve Lockie, Philippe Lecomte and Sheesa Beach Travel.

If you encounter a whale shark in this region, please visit [www.sharkwatcharabia.com](http://www.sharkwatcharabia.com) and report your sighting.

The image shows a shark I encountered on the 3<sup>rd</sup> October at Lima South that was spotted 4 months before by Anna Seaman at Octopus Rock. This small 3m male had a severely damaged dorsal fin from a boat propeller injury. From the images taken by Anna earlier in the year the wounds showed a distinct improvement and seemed to be healing well.



## WHALE SHARKS BEFORE BREAKFAST! A PERFECT WAY TO SPEND YOUR WEEKEND DIVING IN THE MUSANDAM

FEATURE **STEVE WOOD, IDC STAFF INSTRUCTOR**



In October a group of us joined Sheesa Beach Travel and Tourism for a 2 night dhow trip aboard Al Montaser, their 75ft, triple decked dhow.

The weather was perfect, the seas flat calm and with clear skies and the promise of great visibility we departed Dibba harbour at 8pm on the Thursday night for the 5 hour journey to our overnight mooring in Sheesa Bay.

Al Montaser is a great boat to spend a weekend aboard. It has 5 cabins in a range of configurations, a large air conditioned lounge, a beautiful front deck complete with mattresses and cushions, and a huge top deck with sun loungers. With all that room there is always a quiet spot if you want or lots of seats and cushions for you to sit with your fellow divers and be sociable. To support the divers there is plenty of space for equipment, charging points for cameras, dry areas, and a speedboat for getting you to and from the dive sites.

We settled ourselves onboard and as we set sail the chef produced our evening meal. The food all weekend was good, plentiful and with lots of choice. Breakfast consisted of croissants, toast, cereal, yogurts, and a range of hot dishes such as sausages, eggs and beans. Lunch and Dinner was combinations of salads, fish and meat dishes, Arabic breads and dips, rice and pasta. And the chef would always have a ready supply of fruits, biscuits and cakes for those post dive nibbles. Tea and coffee was available at any time, day or night.

Most of us chose to sleep on deck so would bring our pillows and duvets up from the cabins and find a spare mattress. There is something very special about falling asleep under the Musandam sky. We lost count of the number of shooting stars!

And so to the diving. Neil at Sheesa had put together an itinerary that would showcase some of the best things about the top of the Musandam. At 7am on the Friday morning we

climbed aboard the speedboat and headed for White Rock at the mouth of Sheesa bay. This site can be very challenging with strong currents, so Neil did a detailed check of the conditions and reported that there was little water movement. As we entered the water in 2 groups it was clear the visibility was good. At 20 metres I was still able to see the speedboat at the surface waiting for us!

The area was teeming with life and after 20 minutes we had already seen Devil Rays, Trevally, Barracuda, a friendly turtle, and lots of very large Moray Eels. But then above us loomed a shadow and we had our first whale shark on the scene. A relative baby at around 2 metres but it stayed around for a long time giving us plenty of opportunity to take pictures. Then we spotted another, this time nearer 4 metres in length.

Back on the speedboat comparing experiences and photo's, we realized that between the 2 groups we had seen 3 separate whale sharks! Not a bad way to start your day. By 8:30am we were back on the dhow, enjoying our breakfast and sharing stories of our encounters.

We completed 2 more dives that day – Ras Khaisah and Umm al Fayyarin. Again the visibility was fantastic and lots of life. To finish the day we did a night dive in Sheesa Bay that produced turtles, rays and cuttle fish amongst all the usual nocturnal life.

After 4 long dives you won't be surprised to hear that most of us were wrapped up in our duvets under the stars by around 10pm!

So Saturday dawned to a beautiful sunrise and a large pod of dolphins around the boat! In fact they stayed in the area most of the morning chasing the large shoals of fish.

Sarkan Rock was our first dive of the day, it's a beautiful site with great swim throughs and some impressively sized lobsters as the highlights. Next up Neil took us to Marovi Island and briefed us on where to find the Seahorses. We dropped into the open sea side of the rock and headed down to 24 metres to search. And just as he had described, there on the abandoned ropes of old fishing baskets were 2 large seahorses.

To finish our trip we had a nice shallow dive on Ras Leema. When the visibility is good it's just a lovely site and rarely disappoints.

Returning back to Dibba port around 5pm we all agreed that a weekend on Al Montaser with Sheesa Beach and the team is hard to beat and would recommend it to anyone.



Our thanks to Neil, Greg and the crew for making it a weekend to remember:  
<http://sheesabeach.com/diving>

**SCUBA**  
**STEVE**



# A NEW DIVING TRIP LAUNCHED SINCE JULY

FEATURE **NEIL MURPHY, OPERATIONS MANAGER @ SHEESA BEACH** PHOTOGRAPHY **STEVE WOOD**



In July of this year, we launched a new diving trip for the divers that have been loyal to us on a sharing basis. Traditionally we have been strong in the private cruises and have tended to shy away from the shared diving live aboard trips.

These trips have now become increasingly popular and even have a recent article in a very prominent magazine written about them. The fact that we are prepared to push beyond the traditional 2 night anchorage points of Sheesa Bay and up towards Kumzar, have allowed our divers the opportunity to dive areas that are not frequented that often. It has also created a bond amongst them and as such we now have a great database to work off when planning our trips.

A typical scenario is to leave at 8pm on a Thursday evening on-board our luxurious Al Montasser live aboard dhow (by far the neatest, cleanest and fastest dhow in the Musandam) and head up towards Sheesa Bay, Musandam Island or anchor just outside Kumzar. It is a lengthy haul up but the reward the following day is seeing the delight of the divers when they wake up to majestic scenery, dolphins at play around the dhow, the smell of coffee and helpful and very attentive dive guides. Following a light continental breakfast is the first dive at 7am. Dive sites such as Abu Sur, Ras Kumzar, Abu Rashid (Tawakul), and for

the more experienced divers even Kachalu are a mere short hop via speedboat to some of the best diving in Oman/UAE waters. We have encountered plenty of Whale Sharks, eagle rays, devil rays, blacktip and white tip reef sharks and a host of other marine life in these areas and often on the first dive of the trip, thereby setting the tone for the rest of the trip. A hearty breakfast follows the first dive before the 2<sup>nd</sup> begins after digesting breakfast at 11am. Back for lunch at 12:30pm and a wee rest and nap before the 3<sup>rd</sup> dive at 3pm.



Our favourite site at this time of the day is Ras Musandam, where it is suddenly as if someone has switched on a light in a dark room as a comparison to how this wall dive comes alive. A night dive invariably ends the days diving on Red Island (Ras Hamra) and dinner on the top deck of the dhow is followed by a few drinks and reminisces of the days events. A popular

2<sup>nd</sup> evenings anchorage point for us is Khor habelyn or Khor Qabal, where the following days diving takes place on sites such as Umm Al fayarrin, Ras Sarkan, Sarkan Rock, Morovi Island, Lima Rock or Ras Lima (a little gem of a dive) depending on where the guides and Omani captains feel the conditions best warrant the dive.

Our return to Dibba port is a leisurely 2 and a half cruise, plenty of time to download those photos, catch 40 winks on the sunbeds or Arabic seating or just chat to the rest of the tour party.

Another great option we provide is the camp and dive and camp and dhow packages. Head out from the hustle and bustle of the cities to our camp. The camp is located 5 minutes away from the port and has 6 female and male toilets and showers, 2 majlis seating areas and tented accommodation. Enjoy a buffet dinner as well as a hearty breakfast and then head out on 2 guided dives into the musandam. All this for only 495Dhs (equipment excluded). There is also the dhow option as you can hop onto one of our day dhows and head out to Huffa Bay for some rest and relaxation, enjoy a buffet lunch, do some snorkeling, hand line fishing or just relax on the Arabic seating provided on the dhows. This option combined with a nights accommodation in the camp is only 395Dhs.



# FEATURED CREATURE

## WHALE SHARK (*Rhincodon typus*)

FEATURE IUCN RED LIST 2011 BY IUCN PHOTOGRAPHY © ANDRE SEALE/MARINE PHOTOBANK



### Local Species in the IUCN Red List 2011

#### RED LIST CATEGORY & CRITERIA: **VULNERABLE**

Scientific Name: *Rhincodon typus*

Common Names: Whale Shark

**Justification:** This assessment is based on the information published in the 2005 shark status survey.

The Whale Shark (*Rhincodon typus*) is a cosmopolitan tropical and warm temperate species and is the world's largest living chondrichthyan. Its life history is poorly understood, but it is known to be highly fecund and to migrate extremely large distances. Populations appear to have been depleted by harpoon fisheries in Southeast Asia and perhaps incidental capture in other fisheries. High value in international trade, a K-selected life history, highly migratory nature

and normally low abundance make this species vulnerable to commercial fishing. Dive tourism involving this species has recently developed in a number of locations around the world, demonstrating that it is far more valuable alive than fished.

**Geographic Range:** Whale Sharks are found in all tropical and warm temperate seas except the Mediterranean. Although the range of this species typically lies between latitudes 30°N and 35°S, it has occasionally been sighted at latitudes as high as 41°N and 36.5°S. Whale Sharks are known to inhabit both deep and shallow coastal waters and the lagoons of coral atolls and reefs. Iwasaki (1970) reported that they are found in surface seawater temperatures between 18-30°C, but most frequently occur in surface sea-water between 21-25°C. Archival tags have recorded dives to over 700m and a water temperature of 7.8°C off the coast of Belize.

Whale Sharks are found almost all year round off the east coast of Taiwan (Province of China), Honduras and near the Seychelles. Ongoing studies on the population of Whale Sharks around Seychelles inner islands indicate that, although occasional shark sightings are made throughout the year, there are two seasonal peak sighting periods from June to August and October to November. Similar patterns of infrequent year-round sightings and seasonal feeding aggregations of larger numbers (tens, to low hundreds) are recorded from many areas. Aggregations of whale shark occur in Indian coastal waters between December and April; March-June in Tanzania; in Mozambique and northern KwaZulu-Natal (South Africa) from November to January; off the coast of Somalia in September; off Chile during October; in the Sea of Cortez around May-June and October-November; in the Gulf of Mexico between August and September; off the coast of Belize in April/May to June; in the



Bohol Sea of the Philippines between April and May; in the Coral Sea, near the Great Barrier Reef during November and December; at Ningaloo Reef in Western Australia in March-May and at Christmas Island in the Indian Ocean between November and January. There are also occasional reports from the Florida. Although whale sharks have been sighted in numerous other regions, these sightings are generally sporadic and seasonal.

Recent developments in electronic and satellite tagging of Whale Sharks have demonstrated that these animals undertake multi-annual and very long-distance migrations. These include over 2,000km from north-west Australia towards Asia, 550km within a few weeks, a 2,000km two month migration from the Mindanao Sea, inner Philippines, to 280km south of Vietnam and a 13,000km migration in over 37 months from the Gulf of California, Mexico, to near Tonga. Three sharks tagged in the Seychelles, Indian Ocean, in 2001 travelled west to Zanzibar, north-west to Somalia, and over 5,000km to the coast of Thailand, respectively.

**Native:** American Samoa; Angola; Anguilla; Antigua and Barbuda; Argentina; Aruba; Australia; Bahamas; Bahrain; Bangladesh; Barbados; Belize; Benin; Brazil; Brunei Darussalam; Cambodia; Cameroon; Cape Verde; Cayman Islands; Chile; China; Colombia; Congo; Congo, The Democratic Republic of the; Cook Islands; Costa Rica; Côte d'Ivoire; Cuba; Djibouti; Dominica; Ecuador; Egypt; El Salvador; Equatorial Guinea; Eritrea; Ethiopia; Fiji; French Guiana; French Polynesia; Gabon; Gambia; Ghana; Grenada; Guadeloupe; Guatemala; Guinea; Guinea-Bissau; Guyana; Haiti; Honduras; India; Indonesia; Iran, Islamic Republic of; Iraq; Israel; Jamaica; Japan; Jordan; Kenya; Kiribati; Liberia; Madagascar; Malaysia; Marshall Islands; Martinique; Mauritania; Mexico; Micronesia, Federated States of; Montserrat; Morocco; Mozambique; Myanmar; Namibia; Nauru; Netherlands Antilles; New Caledonia; New Zealand; Nicaragua; Nigeria; Niue; Oman; Pakistan; Panama; Papua New Guinea; Peru; Philippines; Pitcairn; Portugal; Puerto Rico; Qatar; Saint Kitts and Nevis; Saint Lucia; Saint Vincent and the Grenadines; Samoa; Sao Tomé and Príncipe; Saudi Arabia; Senegal; Sierra Leone; Solomon Islands; Somalia; South Africa; Sudan; Suriname; Taiwan, Province of China; Tanzania; United Republic of; Thailand; Togo; Tokelau; Tonga; Turks and Caicos Islands; Tuvalu; United Arab Emirates; United States (California, Hawaiian Is., Oregon, Washington); Uruguay; Vanuatu; Venezuela; Viet Nam; Virgin Islands, British; Virgin Islands, U.S.; Wallis and Futuna; Western Sahara; Yemen.

**Population Trend:** Decreasing

**Habitat and Ecology:** Joung et al. (1996) established that whale sharks are ovoviparous when they reported a female (~10.6 m TL) harpooned off Taiwan (Province of China)

containing approximately 300 embryos. These embryos ranged in length from 48-58cm. One juvenile from this litter, born at 58cm TL, attained a length of 143cm TL when raised in an aquarium for 143 days. Sixteen whale sharks measuring 3.1-6.3m TL have previously been held in captivity at the Okinawa Expo Aquarium, Japan. Growth rates of three sharks held from 458-2,056 days ranged from 21.6-29.5cm per annum, but may not be comparable to growth rates in the wild. There have been few reports of pregnant females or juvenile whale sharks under 3m TL in the literature. The largest female so far reported is an estimated 20m, 34t Whale Shark landed in Taiwan (Province of China), although other sources suggest a 15m maximum total length TL.

No long-term studies have produced validated growth rates in the wild, age at maturity, or maximum age for this species, although Pauly (2002) has tentatively suggested a slow growth rate and a 5-6% annual mortality rate for adult *R. typus* and estimated longevity as 60 to >100 years, for a total length of 14m. Wintner's (2000) study of vertebral growth rings recorded three mature males with 20, 24 and 27 growth rings at 903, 922 and 945cm TL respectively, and an immature female with 22 rings and 577cm TL (calculated from a precaudal length of 445cm). The presence of scars and abrasions on the claspers of several sharks over 9m TL at Ningaloo Marine Park also suggests that sexual activity, at least in males, is not common prior to attaining this length. Wintner (2000) also found that adding a theoretical data point at 100 years and 14m TL produced a Bertalanffy growth curve with lower standard errors and Linf closer to the reported maximum length than did 60 years and 14m TL.

The Fishbase ([www.fishbase.org](http://www.fishbase.org)) default life history tool for this species is set at a maximum length of 20m TL and, strangely, Linf of 14m TL. This yields an estimated age at maturity of nine years at 560cm TL, a generation time of 21 years and longevity of 59 years. Most of these parameters are clearly too low. Recalculating these data for Linf 20m TL yields an age at maturity of 21 years at 770m TL (still low). Generation time becomes an estimated 63 years and longevity almost 150, which seems too high for a warm water species, although recorded for some species of sturgeon *Acipenseridae*.

Chang et al. (1997) considers that a breeding ground for whale sharks apparently lies close to Taiwan (Province of China). However, the length of gestation, localities of birth, and frequency of reproduction are not yet known for this species and require further study.

Because of their large size, Whale Sharks are probably not subject to extensive predation after reaching maturity. There are only two reports of juvenile whale sharks taken by

another animal: a Blue Marlin and a Blue Shark. Several Whale Sharks from Ningaloo Reef possess scars that may be the result of shark attacks at an early age and two orcas *Orcinus orca* have been filmed attacking, killing and consuming an 8m whale shark.

The Whale Shark is one of only three species of shark that filter feeds, the other two being the Megamouth (*Megachasma pelagios*) and Basking Shark (*Cetorhinus maximus*). Unlike these two, the Whale Shark does not rely on forward motion for filtration, but is able to hang vertically in the water and suction feed by closing its gill slits and opening its mouth. *Rhincodon typus* is believed to be able to sieve zooplankton as small as 1mm in diameter through the fine mesh of their gill-rakers, typically feeding on a variety of planktonic and nektonic prey, small crustaceans and schooling fishes and even occasionally ingesting small tuna and squid.

**Major Threat(s):** Small-scale harpoon and entanglement fisheries have taken place in various regions of the world, including India (whale shark fishing banned in 2001), Pakistan, Taiwan (Province of China), the Philippines (banned in 1998) and the Maldives (prior to protection in 1995). These took Whale Sharks primarily for their meat, liver oil, and/or fins. Liver oil was traditionally used for water-proofing boat hulls. The huge fins are low quality but of high value as restaurant "signboards" in east Asia, and the soft meat (known as "tofu shark") is in great demand in Taiwan (Province of China).

Fishermen in the Maldives used to take 20-30 Whale Sharks per year for their oil, but reported declining catches during the 1980s to early 1990s. In a study in the Philippines, it was found that in 1997 there was a 29% decline in the whale shark catch at two of the primary sites, despite an increase in effort due to rising prices for exported products. The increased fishing effort and falling catches led to the 1998 fishery ban, although illegal fishing and attempted export of meat still continues on a small scale, with shipments having been impounded by customs authorities.

In Pakistan, the flesh was traditionally eaten either fresh or salted, and liver oil used for treating boats. The number of sharks taken each year was small and often accidental bycatch. Recent landings are unknown.

A traditional small-scale seasonal harpoon fishery in India took whale sharks for their liver oil. About 40 were harpooned during April 1982, but demand for "tofu shark" meat in Taiwan (Province of China) led to increased fishing effort in Gujarat during the 1990s. Prices rose significantly after 1997, with 279 Whale Sharks taken in January-May 1999. One hundred and forty-five sharks were taken offshore (10-15km) in December 1999, and 160 in coastal waters in January-May 2000. The





fishery closed in May 2001, when the Indian Ministry of Environment and Forests legally protected whale sharks in territorial waters.

Whale Sharks have been targeted for many decades in Taiwan (Province of China), but catches appear to have declined since the 1980s. Billfish harpooners from Hengchun Harbour, fishing south of Penghu, reportedly landed 50-60 Whale Sharks each spring in the mid-1980s, but annual landings at this location subsequently declined to about 10 sharks, and fewer still in 1994 and 1995. In 1995, landings throughout Taiwan (Province of China) were approximately 250-272, around 158 taken as bycatch in set nets, 114 by harpoon. The government introduced a Whale Shark reporting system in 2001. This and other sources indicate that the total number of Whale Sharks caught during 2001 was 89 (38 by set nets, 36 in the billfish harpoon fishery and 15 by other methods), and that 94 sharks weighing about 104t in total were landed during the 12 months from March 2001 to March 2002. The domestic catch has apparently declined by 60-70% since surveyed by Chen et al. (1996). Chen and Phipps (2002) note that the sum of the reported catch and imports is smaller than the quantity of Whale Shark meat on the domestic market, indicating that official data under-represent imports.

Wholesale Whale Shark meat prices in Chinese Taipei peaked at US\$7.00/kg in the late 1990s when a 10t shark was worth approximately US\$70,000, subsequently falling to US\$2.00/kg in 2001.

Although Ramachandran and Sankar (1990) considered that *R. typus* was an underexploited species, there are now concerns that Whale Shark populations are decreasing in many locations as a result of stock depletion by unregulated fisheries. Ecotourism industries based on viewing Whale Sharks are now developing in several locations, including Mexico, Australia, Philippines, south-eastern Africa, Seychelles, Maldives, Belize and Honduras. The number of people swimming with Whale Sharks at Ningaloo Reef, Western Australia, during the short whale shark season from March to June, increased from 1,000 in 1993 to almost 5,000 in 2002. This well-managed industry contributes significantly to the national and regional economy (overseas participants make up 65-75% of participating tourists).

Ecotourism has taken over from hunting as a significant source of income for Maldivian operators, since the small fishery that once existed ceased after legislation was introduced in 1995 to protect whale sharks. Similarly, the development of an important whale shark ecotourism industry in areas of the Philippines that experience large seasonal aggregations of whale sharks is now underway.

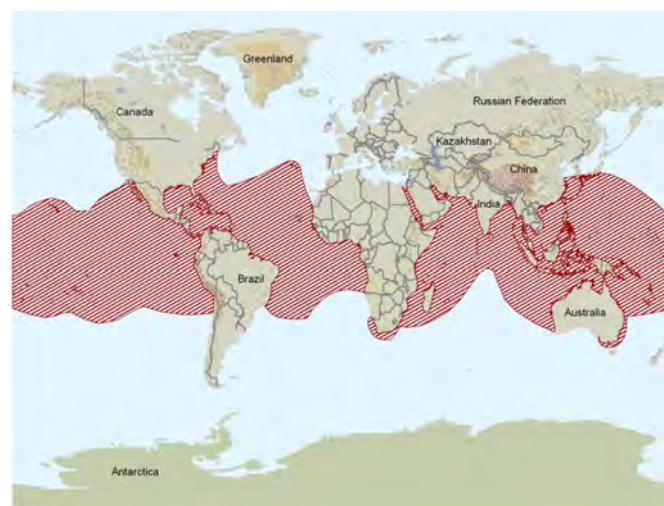
In the Seychelles, 162 tourists/week interacted with *R. typus* in November 1996 and the industry could be worth US\$3-5 million annually there. Revenues are also significant in several other range states, indeed rather higher than revenues from fisheries for this species. To ensure that high

levels of tourism do not have an adverse effect on the behaviour of Whale Sharks at these locations and other aggregation sites identified in future, monitoring must continue as a priority.

In Tanzania Whale Shark sightings are apparently on the increase. Surprisingly, fishermen do not actively hunt whale sharks and do not consume the meat; nor do they recognise that the fins may have any value. Four individuals caught in March 2001 were not consumed nor were their fins sold. A very small amount of meat was taken, possibly for medicinal. They are avoided by net fishermen because of potential damage to the nets. Whale sharks have been sighted for the last few years during the inter-monsoonal period of March-June off Zanzibar. They are caught in purse, drift and gillnet fisheries.

**Conservation Actions:** Whale Sharks are legally protected in Australian Commonwealth waters and the states of Queensland, Tasmania and Western Australia (regulations control human interactions in the latter state), the Maldives, Philippines, India, Thailand, Malaysia, Honduras, Mexico, US Atlantic waters and a small area off Belize. Full legal protection is under consideration in South Africa and Taiwan (POC) has recently introduced an annual quota for its fishery. In 1999 the whale shark was listed on Appendix II of the Bonn Convention for the Conservation of Migratory Species of Wild Animals (CMS). This identifies it as a species whose conservation status would benefit from the implementation of international cooperative Agreements. A US proposal to add the Whale Shark to Appendix II of the Convention on International Trade in Endangered Species (CITES) was rejected by the 11th Conference of Parties in 2000, but a revised proposal, submitted by Philippines and India, was accepted by the 12th Conference in 2002 and came into force at the end February 2003. This requires fishing states to demonstrate that any exports were derived from a sustainably managed population and to enable exports and imports to be monitored.

**Source:** Norman, B. 2005. *Rhincodon typus*. In: IUCN 2011. IUCN Red List of Threatened Species. Version 2011.1.



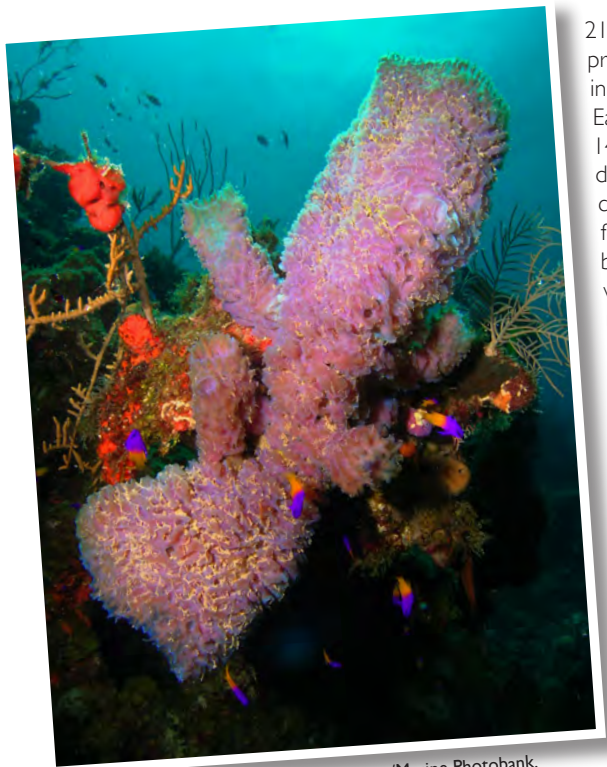
[www.iucnredlist.org](http://www.iucnredlist.org)





# CORAL REEFS AND MEDICINE

FEATURE NOAA CORAL REEF CONSERVATION PROGRAM



Azure Vase Sponge. Photo by Thomas Sharp/Marine Photobank.

The genetic diversity found in coral ecosystems is unparalleled and this diversity has proven beneficial for humans through the identification of potentially beneficial chemical compounds and through the development of medicines, both derived from organisms found in coral ecosystems.

Many species found in coral ecosystems produce chemical compounds for defense or attack, particularly the slow-moving or stationary species like nudibranchs and sponges. Searching for potential new pharmaceuticals, termed bioprospecting, has been common in terrestrial environments for decades. In fact, nearly half of the medicines in use today have their origins in natural products, mostly derived from terrestrial plants, animals, and microorganisms. However, bioprospecting is relatively new in the marine environment and is nowhere close to realizing its full potential. Creatures found in coral ecosystems are important sources of new medicines being developed to induce and ease labor; treat cancer; arthritis, asthma, ulcers, human bacterial infections, heart disease, viruses, and other diseases; as well as sources of nutritional supplements, enzymes, and cosmetics. The medicines and other potentially useful compounds identified to date have led to coral ecosystems being referred to as the medicine cabinets of the 21<sup>st</sup> century by some, and the list of approved and potential new drugs is ever growing.

However, this focus on coral ecosystems for medical properties is not unique to the

21<sup>st</sup> century. The unique medical properties of organisms found in coral reefs was recognized by Eastern cultures as early as the 14<sup>th</sup> century; tonics and medicines derived from seahorse extracts continue to be in high demand for traditional medicines. The gall bladder of several fish species were used in Palauan traditional medicine to treat venomous stings of other marine organisms, such as stonefish. While knowledge and use of some traditional medicines has been lost, there is renewed interest within modern medicine in researching some of these treatments.

Toxins provided by reef creatures are of particular interest in present day pharmaceutical research. Stonefish, sea snakes, box jellyfish, cone shells, and pufferfish contain some of the most toxic compounds presently known to man.

These chemical compounds are being studied by researchers, and some have already been used to develop medicines or cosmetics. For example, cone snail neurotoxin is showing promise as a powerful painkiller.

Other types of chemical compounds are also proving fruitful. The antiviral drugs Ara-A and AZT and the anticancer agent Ara-C, developed from extracts of sponges found on a Caribbean reef, were among the earliest modern medicines obtained from coral ecosystems. The anti-cancer properties of a number of additional compounds derived from organisms found in coral ecosystems are also being studied. Chemicals derived from Caribbean sea-whip corals have shown skincare, painkiller, and anti-inflammatory properties and a compound derived from a Pacific sponge has led to testing of over 300 chemical analogs for anti-inflammatory properties. Kainic acid, which is used as a diagnostic chemical to investigate Huntington's chorea, a rare but fatal disease of the nervous system, was isolated from organisms on a Japanese reef. Australian researchers have developed a sun cream from a coral chemical that contains a natural "factor 50" sun block.

NOAA is even playing a role in the discovery of new medical compounds. A research team, including NOAA scientists at the Hollings Marine Laboratory, has discovered new compounds derived from a sea sponge and corals. One compound eats away at the shield bacteria used to protect themselves

from antibiotics. The second discovery was compounds that fight some of the worst infectious bacterial strains. Besides being the source of potentially useful chemical compounds, the porous limestone skeleton of corals has been tested as bone grafts in humans. Pieces of coral set into a fracture act as a scaffold around which the healing can take place. The implant eventually disappears, absorbed by the new growth of bone. Rates of rejection are much lower than with artificial grafting materials.

It should be noted that, aside from the compounds mentioned here, there are likely many other compounds under development which have not yet been disclosed to the wider public. It is safe to say that the published research is only the tip of the iceberg when it comes to the pharmaceutical possibilities presented by compounds derived from creatures found in coral ecosystems, including the corals themselves. Thus, it is nearly impossible to predict what the future economic benefits of bioprospecting will be, as more potentially valuable medical compounds are isolated from organisms found in coral ecosystems. This aspect of reef value was not incorporated into the estimated \$5.5 billion total global value of coral reef biodiversity, but is certainly both a consideration for the economic value of coral reefs and the costs to society if reefs are lost.



Scientists collecting data on a coral reef. Photo by © Wolcott Henry 2005/Marine Photobank.



# US RESIDENTS SAY HAWAII'S CORAL REEF ECOSYSTEMS WORTH \$33.57 BILLION PER YEAR

FEATURE AND PHOTOGRAPHY NOAA

PEER-REVIEWED SURVEY ASKED US PUBLIC VALUE OF PROTECTING THE MAIN HAWAIIAN ISLANDS' CORALS

A peer-reviewed study commissioned by NOAA shows the American people assign an estimated total economic value of \$33.57 billion for the coral reefs of the main Hawaiian Islands.

"The study shows that people from across the United States treasure Hawaii's coral reefs, even though many never get to visit them," said Jane Lubchenco, Ph.D., under secretary of commerce for oceans and atmosphere and NOAA administrator. "It illustrates the economic value of coral reefs to all Americans, and how important it is to conserve these ecosystems for future generations."

"We are pleased that research is being done to look at the value of Hawaii's coral reefs, but before we consider any potential applications of the study we will consult closely with local communities," said William J. Aila, Jr., chairperson of the Hawaii Department of Land and Natural Resources.

The study employed a scientifically developed national Internet survey of more than 3,200 households – a representative sample of all US residents, not just Hawaii or coastal residents. From June through October 2009, the survey allowed the public to express its preferences and values for protection and restoration of the coral reef ecosystems around the main Hawaiian Islands. In this study, total economic value includes so-called passive use values, such as the willingness to pay to protect the coral reef ecosystem for future generations, as well as direct use values, such as snorkeling over a coral reef or consuming fish supported by coral reef ecosystems.

A panel of independent university and private scientists, from both Hawaii and the continental US, provided facts to the survey design team about the Hawaiian coral reef ecosystems and provided estimates of how the coral reef ecosystems would change in response to the two possible management options. The descriptions, including illustrations, of improvement to coral ecosystems gave survey respondents a clear understanding of what they were being asked to value and how the ecosystems would change as a result of the protection measures.

To estimate underlying values the public places on coral reef ecosystems, the study team presented survey participants with two specific measures to protect and restore coral reef ecosystems. One measure aimed at reducing effects to coral ecosystems from



A small moray eel in the Hawaiian Islands Humpback Whale National Marine Sanctuary off the coast of Maui.

fishing, and another to repair reefs damaged by ships.

The main Hawaiian Islands consist of eight volcanic islands that range in age from active lava flows on the east side of the Big Island to seven million-year-old Kauai. Despite their economic significance, reefs near urbanized areas, such as Honolulu, Wailuku, and Kahului, have experienced increasing stress from ever-increasing population and other pressures.

The national survey was funded by NOAA and the National Science Foundation, and was designed to address the issue of

Internet bias. The survey was conducted through two Internet panels; one recruited participants using controlled random digit dialing telephone surveys and the other using standard US Bureau of the Census methods of randomly selecting households and going to each household to recruit participants via face-to-face interviewing.

NOAA will use this study to provide a reliable estimate of the value of the coral reef ecosystem around the main Hawaiian Islands. It also demonstrates that coral reefs provide valuable ecological services for US residents, regardless of whether they actually use them.



# NOAA RELEASES STATUS REPORT ON FLORIDA KEYS NATIONAL MARINE SANCTUARY MARINE RESOURCES

## REPORT HIGHLIGHTS LOCAL, REGIONAL, GLOBAL STRESSORS TO KEYS MARINE ECOSYSTEM



Elkhorn coral, listed in 2006 as threatened on the Endangered Species Act, is still found within Florida Keys National Marine Sanctuary, but well below its historic population numbers. Photo by NOAA/FKNMS.

NOAA scientists have found that pressure from increasing coastal populations, ship and boat groundings, marine debris, poaching, and climate change are critically threatening the health of the Florida Keys ecosystem. Many historically abundant marine resources such as green sea turtles and coral habitats continue to be at risk with low rates of recovery.

The findings were released today in the Condition Report 2011 for Florida Keys National Marine Sanctuary, describing the status and trends of the sanctuary's water quality, habitats, and marine and cultural resources, and the human activities that affect them. This report is one of an ongoing series of condition reports for NOAA's 13 national marine sanctuaries and Papahānaumokuākea Marine National Monument. It will guide a comprehensive review of sanctuary regulations and management plans beginning in 2012 and provide an important baseline on the status of sanctuary marine resources.

The report documents improvements in local water quality and an increase in the size and abundance of some fish species and spiny lobster in large reserves within the sanctuary, but also notes that challenges remain such as, addressing regional influences to water quality, human impacts on marine resources, and the effects of climate change. It further suggests additional efforts are necessary to support sustained management efforts, and increase regulatory compliance and community engagement to address those challenges.

"This report provides us with a great benchmark that can be used to protect our sanctuary's valuable and productive marine ecosystem," said Sean Morton, superintendent, Florida Keys National Marine Sanctuary. "The report also helps identify gaps in current monitoring efforts and highlights areas where we need additional information. Our long-term monitoring shows management actions are contributing to some

positive results, however recovery of ecosystem health takes time."

Since its designation in 1990, Florida Keys National Marine Sanctuary has worked with a wide array of local, state, and federal partners to promote conservation and sustainable use of the Keys ecosystem for future generations. These objectives are addressed through public education and research programs, the implementation of regulations including the prohibition of pollution discharge in sanctuary waters, and the designation of highly protected no-take marine zones to protect 6,000 species of marine life and reduce user conflicts. These efforts have been critical tools for natural resource management in the Florida Keys where ocean recreation and tourism supports more than 33,000 jobs, and accounts for 58 percent of the local economy and \$2.3 billion in annual sales.

NOAA prepared the condition report in consultation with outside experts from the scientific community. The full report is available online at <http://sanctuaries.noaa.gov/science/condition/fknms>.

Florida Keys National Marine Sanctuary protects 2,900 square nautical miles of critical marine habitat, including coral reef, hard bottom, sea grass meadow, mangrove communities and sand flats. NOAA and the State of Florida manage the sanctuary.

Visit us at <http://floridakeys.noaa.gov> or on Facebook at <http://www.facebook.com/floridakeysnoaa.gov>



After being subject to decades of intense fishing pressure in the Florida Keys, harvest of Goliath grouper has been prohibited since 1990. Photo by NOAA/FKNMS.



# REEF CHECK

Reef Check is a coral reef monitoring protocol that uses standard and simple methodology to collect robust scientific data. Although its main objective is the study of coral reefs health, it also looks to educate the public about coral reef crises, induce local community action to protect remaining healthy corals and contribute to economically sustainable solutions.

This methodology was implemented in 1997 by Reef Check Foundation, a non-profit international marine conservation organization. With the need to understand the global conditions of our coral reefs, it was mandatory by that time to establish a methodology that could be used all around the world, and done by divers with different backgrounds, not only marine biologists.

After intensive training, divers are able to collect data that is used in the creation of a Global and Regional/Local report regarding the status of the coral reefs. Reef Check teams collect four types of data for each dive site:

1. A description of each reef site based on 30 measures of environmental and socio-economic conditions and ratings of human impacts;
2. A measure of the percentage coverage of different substrate types, including live and dead coral;
3. Invertebrates indicator species counts;
4. Fish indicator species counts.

### REEF CHECK AND EDA

By joining our Reef Check monitoring team, you can help monitor and track the world's reefs. Reefs, both tropical and temperate, are in a state of crisis, today they look vastly different from what they did only 30 years ago. Big fish are scarce and some marine creatures have disappeared completely. Over 45% of the world's reefs are severely threatened by human activities including overfishing, pollution and global warming. By becoming a certified Reef Check diver, you can help track the health of our reefs by participating in monitoring surveys and conservation worldwide.

Until now, EDA has trained more than 90 divers with Reef Check methodology and it intends to train a few more in 2012. By dividing the divers in different Reef Check teams, we will be able to collect data at several sites on the East Coast of the UAE, with particular focus on the Marine Protected Areas (MPAs) Dibba and Al Aqah, as well as in Abu Dhabi. By collecting data every month, EDA will be capable of writing a 2012 report on the Status of Coral Reefs of both areas. This report will make us understand the principal threats that our marine environment is facing at the moment and the actions that need to be implemented in order to re-establish a healthy ecosystem in the area.

FOR MORE INFORMATION PLEASE VISIT:  
[www.reefcheck.org](http://www.reefcheck.org) and  
[www.emiratesdiving.com](http://www.emiratesdiving.com)

# WYLAND AND HALLS RECEIVE COVETED OCEAN CONSERVATION AWARDS

The world's largest marine conservation organization, the Reef Check Foundation, announced that this year's prestigious marine conservation awards were presented to the marine artist Wyland and underwater filmmakers Howard and Michele Hall at the "Save the Reefs, Save the Oceans" charity Gala on Friday, September 16, 2011, at the Jonathan Beach Club in Santa Monica, California. Reef Check's mission is to empower people to save our reefs and oceans.

The Poseidon Award was presented to underwater filmmakers Howard and Michele Hall for their work in films about reefs and the ocean such as Coral Reef Adventure that have been seen by millions of people throughout the world. In 1994 Howard directed the first underwater IMAX 3D feature, Into the Deep. In 1998 Michele produced and Howard directed the IMAX feature, Island of the Sharks, which was an enterprise of Howard Hall Productions. Prior to the presentation, the Halls showed never-before-seen footage from their films.

The Reef Stewardship award was presented to the artist Wyland who has communicated a conservation message to over 1 billion people using paintings and sculpture of underwater themes from whales to coral reefs. Wyland worked with Reef Check to raise ocean awareness in American Samoa during the International Year of the Reef.

Reef Check supporters include Cameron Diaz and Honorary Board Chair Leonardo DiCaprio, and previous honorees have included Jean-Michel Cousteau, Daryl Hannah and Dr. Sylvia Earle.

### REEF CHECK PARTNERS WITH REEFERTEES.COM

Reefer Tees is an online venue offering cool and funny t-shirts for the reef hobbyist community and everyone out there looking to update their tee collection with some silly fun.

Purchase a shirt at <http://reefertees.com> and \$1 will go to Reef Check for the conservation of our reefs and oceans!



PHOTOS BY ERIC CHENG. Reef Check Board Chair Sue Chen, Honoree Wyland, Honoree Michele Hall, Honoree Howard Hall, Reef Check Executive Director Dr. Gregor Hodgson.



Wyland receives the Reef Stewardship Award



Poseidon Award Honorees Michele and Howard Hall during their presentation of never beforeseen footage from their films



## REEF CHECKS WITH OCEANSWATCH IN VANUATU

FEATURE GRACE PHILLIPS, VANUATU PROJECT LEADER, OCEANSWATCH



Reef Check at Suvu Bay Tabu area



Coral polyps, Vanuatu



Vanuatu reef

Vanuatu is a wondrous land of dense tropical forests, hidden villages, golden beaches and ancient kastom traditions. Below the surface of its Coral Sea waters it is just as magical. Untouched reefs abound with fish and turtles, sea snakes slither amongst the hard coral, and dolphins cruise the crystal clear depths. A marine environment this pristine, belonging to the ni-Van population of a mere 250,000, is certainly worth protecting. This is what draws OceansWatch to Vanuatu each year.

OceansWatch is a New Zealand based non-profit organisation, which draws scientists, divers, and sailors together to interact with coastal communities in developing nations throughout the world to promote marine awareness, conservation and sustainable uses of their marine resources. The use of a 34ft yacht named 'Magic Roundabout' allows the OceansWatch team to visit islands and villages further afield and usually often out of range of government projects and other NGOs.

One aspect of OceansWatch's work is to conduct Reef Check surveys in each community. On arrival in Vanuatu at the beginning of June, the OceansWatch Vanuatu team began Reef Check training with Katie Thomson, the Reef Check Vanuatu coordinator. Katie has been working in Vanuatu for 5 years, conducting training workshops in villages nation-wide to empower the communities to monitor their own reefs. The reefs are controlled by family groups or villages as an extension of land-ownership, rather than by the government. When carrying out Reef Check surveys at the community reefs, OceansWatch encourages the participation of trained locals. We've found that a great way to involve the non-trained locals is to get them to drop the

plumb line on the substrate survey or to spot the invertebrates for us – it's amazing how proficient they are!

Almost half way through the season, the OceansWatch Vanuatu team has already visited 4 communities in the southern islands of Vanuatu and conducted 10 Reef Check surveys. The main finding that stands out is the good health of the coral. We have observed little to no bleaching or disease on the reefs and low anthropogenic impacts such as anchor damage or dynamite fishing. Aside from the reefs around the islands of Nguna and Pele, the southern reefs appear free from devastating Crown of Thorns starfish outbreaks, which are causing some concern in areas further north in Vanuatu. The reef substrate mostly consists of hard coral (*Acropora* and *Pocillopora*, and some large specimens of slow growing species) and a lot of rock, with a low percentage of soft coral. However, we have encouragingly found extremely little nutrient indicator algae, possibly thanks to the low levels of coastal development and the absence of flushing toilets and agricultural run-off. This, coupled with low levels of sediment and coral rubble, should lend a hand in successful coral larval settlement in the years to come.

Interestingly, invertebrates have been fairly absent on the surveys. The most common invertebrates we've found have been sea-cucumbers and pencil urchins. Reef Check Vanuatu surveys also include local indicator species such as *Trochus* and Green snail (large molluscs which are harvested for food). The presence of *Trochus* has been sporadic throughout the islands but not one Green snail has been spotted, which is cause for some concern.

An absence of large fish has been noticed on a lot of the reefs but small parrotfish are plentiful throughout, as are butterfly fish. Surgeonfish, an algal grazer and another Reef Check Vanuatu indicator species, are also high in numbers which may contribute to the low levels of algae. Despite the absence of large reef fish, several white tip reef sharks and larger specimens such as a big Lemon shark and a Leopard shark have been observed, which is great to see as they have been fished out of most reefs globally.

Vanuatu is at the forefront of marine conservation. Every village we have visited so far has set aside at least one, but often several, marine tabu areas (areas of restricted fishing, harvesting and anchoring to varying degrees of protection). Most of the tabu areas have been set up out of the communities' own initiative and although they may not be internationally recognised conservation areas, they still do the same job! The Vanuatu government has no idea how much of the country's reefs are protected in this way, and this is one task that OceansWatch is helping them with this year – to map any tabu areas we come across. The sheer number of them is so wonderful to see! And by conducting Reef Check surveys inside and outside of tabu areas, we are hoping to build up a picture of how effective they are... so far the reefs are some of the most pristine I have ever seen!

OceansWatch has a few more months left in Vanuatu this season, and we are looking forward to carrying out more Reef Check surveys on the beautiful reefs surrounding the islands of this amazing country.

Please visit: [www.oceanswatch.org](http://www.oceanswatch.org)



## REEF CHECK BRANCHES OUT TO NEW ZEALAND

FEATURE **JESUS RUIZ LOPEZ, REEF CHECK NEW ZEALAND**

PHOTOGRAPHY **REEF CHECK NEW ZEALAND**



New Zealand has a coastline of over 15,000 km, and its marine shore and seascape extends from subtropical waters in the north to cold subantarctic waters in the south. This nutrient rich mix of waters supports a high diversity of marine life. Rocky reefs and kelp beds support many species which are recreationally and commercially fished, such as snapper, blue cod, lobster, kina and paua.

New Zealand is an isolated country in the south-west of the Pacific which means there is a high proportion of marine species only found here.

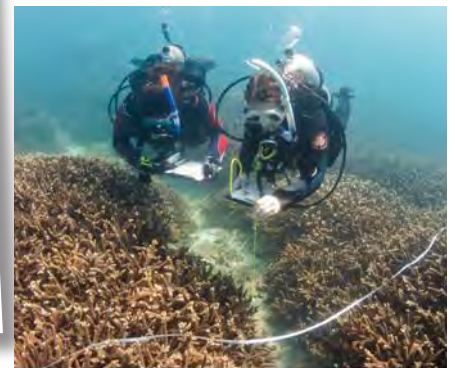
Changes to the marine environment are caused by (over) fishing, land-based sources of pollution, sedimentation and introduction of marine pests. Only 1% of New Zealand's marine environment has been surveyed.

A dedicated group of volunteers in Nelson is setting up Reef Check New Zealand as a non-profit environmental organisation with the aim to protect and help restore the marine environment. EcoDiver Trainer Jesus Ruiz Lopez is training the first 8 volunteers, with the aid of marine biologist Meagan Carter, tailoring the tropical Reef Check protocol to fit the unique New Zealand marine ecosystem.

If you would like to get involved with this new program, please contact [reefchecknz@gmail.com](mailto:reefchecknz@gmail.com). Volunteer opportunities are available for both divers (PADI Advanced Diver or equivalent) and non-divers throughout the year.

## REEF CHECK AUSTRALIA UPDATE

After settling into their new headquarters in Brisbane, Reef Check Australia jumped right into several new projects. The first of many was the launch of REEF Search, a new community engagement program, which got underway in May at Lady Elliot Island as part of Tourism Queensland's Best Expedition in the World. With the support of active partners, Reef Check Australia continues to monitor this new pilot program and has reported great feedback.



The new Grey Nurse Shark Watch program, a project that helps volunteers actively contribute to a community-based photographic identification system, was launched in June. The collective national database from this program continues to better protect this critically endangered species.

The month of July welcomed new surveyors to Reef Check Australia as the team completed another successful volunteer training course in Townsville. Following a visit with headquarters in Los Angeles in August to discuss continued contributions to the worldwide program, members of Reef Check Australia presented data collected by volunteers at the World Conference on Marine Biodiversity in Aberdeen, Scotland in September.

Photos by Reef Check Australia



The upcoming months hold great things for Reef Check Australia! They will host a seminar at the Oceanic Dive and Ecotourism Expo in Brisbane in October in addition to kicking off the survey season with numerous surveys in both North and Southeast Queensland.



## REEF CHECK IN ABU DHABI

FEATURE **KATHLEEN RUSSELL**  
PHOTOGRAPHY **PHILIPPE LECOMTE**

Congratulations to the successful candidates who completed the Reef Check training in Abu Dhabi in September 2011.

A group of intrepid EDA members took up the challenge to become Reef Check Eco Divers. During the three day intensive training program, Ken Atkinson conducted training dives to monitor the coral reefs within the Indo Pacific waters using globally standardized scientific protocol. Participants learn to collect valuable data using the Underwater Reef Guides to establish the healthy status of our local coral reefs. This data can be used by marine park managers or rangers, scientists and government authorities to help keep track of the status of the reefs.

In order to pass, all participants took the Powerpoint ID test (80% to pass) on substrates, invertebrates and vertebrates and field test (90% to pass). Upon successful completion, the divers will be able to participate in Reef Check surveys in the region and to be able to submit the valuable data to the global database. We will be looking at the next Reef Check Eco Diver training in December or January. In the meantime, reef monitoring will begin in Abu Dhabi with qualified Eco Divers to survey some of the coral reefs' statuses.



For more details about Reef Check Training in the UAE, you can contact Emirates Diving Association on:

Tel: +971 4 393 9390

Email: [projects@emiratesdiving.com](mailto:projects@emiratesdiving.com)

## MUSANDAM EXPEDITION 2011

FEATURE **RITA BENTO**



For the third consecutive year, Biosphere Expeditions and EDA concluded another successful expedition in the Musandam. In October, 12 diving volunteers from different countries joined the team for a week to help collect data regarding Musandam coral reef health and threats.

Unfortunately this year the weather played a few tricks on us and we had some days of heavy rain and a few dives had to be canceled, concentrating our data collection only on the North of the Musandam. Nevertheless, all the volunteers managed to get their Reef Check training done. Once the clouds were gone, the team managed to collect the important reef data.

The findings from the expedition show an amazing coral coverage in the north of the Musandam with an average of 58%. Coral Garden being the highlight with a total coral coverage of 81%, therefore living up to its name. As usual for the Musandam area, our fish group indicators show snappers and butterflyfish were the most spotted, although we had a slight decrease in the average number of butterflyfish when compared to 2010 and 2009. On the other hand, the average number of snappers in the north area of the Musandam shows a significant increase as well as the average sizes of groupers that were counted.

To get an idea of the threats that Musandam corals face, the team also looked out for different impacts and damage. This year we had a sad increase in the number of trash, including lost fish nets, and general damage than the previous years. The final report of this expedition where all the data will be analysed will be sent to respective government authorities and we hope that some of the problems found will be addressed in the future.

We look forward to next year's expedition to see how the beautiful Musandam reefs will cope in 2012. We hope that more volunteers from the UAE will be able to join us and embark on this exciting journey.

On this project, Biosphere Expeditions and EDA are working with Reef Check, local dive centres, businesses and resorts, the local community, Sultan Qaboos University, the Oman Ministry for Environment and Climate Affairs, the Oman Tourism Board, as well as the United Nations Environment Programme, the World Conservation Monitoring Centre and the International Coral Reef Action Network (ICRAN). Further support comes from Six Senses (Zighy Bay) Environmental Grant, the Ford Motor Company Conservation & Environmental Grants programme, as well as from the Waterloo Foundation, Land Rover and Swarovski Optik.



# BIOSPHERE EXPEDITIONS MUSANDAM

FEATURE AND PHOTOGRAPHY **CLAIRE DONNELLY**



Neither of us can remember exactly how we found out about the reef checking Biosphere trip in Oman, perhaps it was through the EDA magazine, FB or just a Google search one evening, but however we did manage to find it, we are both extremely glad we became 2011 expedition members.

The lead up to the trip was very well organized, we were sent pre-reading, video training and pre-paperwork to complete, all of which reminded us that this was not a week's diving holiday, but that we were forming a key part of a scientific expedition.

Packing was interesting, we knew we shouldn't take much, space would be a premium, plus we also knew that for a majority of the time we would be ever so slightly damp! For trips like these, it's always advisable to put back half of the clothes you feel you need and still you end up brining back unworn T-shirts and shorts.

We all met up in the Holiday Inn Express in Jumeirah in the morning, here we got to meet the rest of the expedition team, and what a wide range of ages, backgrounds and nationalities we were. The ages ranged from university students through to a couple in their retirement years. We had participants from Oman, UK, New Zealand, Italy, Finland, Germany, Portugal and Spain. All of us though had a common purpose in mind, to add the Reef Check specialty to our PADI skills set and to help Rita (our expedition scientist) gather her data on the current health of specific reefs in Oman, how we would actually do this was still a mystery, but all would become clear over the following days.

After some brief introductions at the hotel, we all boarded a mini bus and took advantage of the travel time to Kashab to get to know each other a bit more. Once we got to Kashab port we got to see our floating home for the next week for the first time. The MS Sinbad is a modern dhow, there is a nice relaxing area on the top and front decks, an air-conditioned communal area in the centre, 8 air conditioned small bedrooms and 4 bathroom areas. Rita and

Rossella (our team leader) had already organized the room numbers and our bags were loaded for us onto the dhow, all we needed to do was store our dive kit in allocated equipment boxes and take our rucksack of clothes to the rooms. Towels and bed linen were provided, so it took little to no time to unpack and meet on the front of the dhow for lunch.

Now is probably an excellent time to mention the food. Each day we were presented with 3 outstanding healthy (with the exception of chips!), mainly vegetarian buffet spreads that we all fell on as soon as it was laid out. We certainly didn't go hungry, and if we needed a mid morning or afternoon snack, there was a huge platter of fruit on permanent display in the common area – most of us commented that we had never eaten so much fruit in a day, but it was hard to resist and constantly topped up. Constant supplies of cold drinks were also available from 2 cool boxes, plus there is a never ending supply of drinking water from a water cooler, so we certainly didn't go thirsty.

Once we were all fed, it was down to the real purpose of the trip, learning about our reef checking roles, the type of data we needed to collect and how this was to be gathered. Rita started by saying that over the next 3 days we were going to hate her as we needed to cover a lot of work in order for us all to be qualified and start the data collection. We didn't get to hate her, but we certainly had a lot of work to cover and also dreaded exams to pass. For the first 3 days we managed to get a couple of relaxing "lazy" dives in with the group, which allowed us get to know each other's diving styles and abilities, inbetween training sessions.

The expedition had attracted a full range of PADI diving levels and qualifications, some members of the team were qualified to PADI dive instructor level, some had fewer than 10 logged dives. As long as you have a desire to dive, want to become a better diver and want to understand the human environmental impact on the reefs, then this is the expedition for you.

The classes and exams we taken over the first 3 days and covered how we would gather the required scientific data. We needed to be able to identify specific fish, specific vertebrae and coral types. This in itself was extremely interesting, although at the end of a long day (breakfast is served at 6am!), attending a lecture and exam tends to be the last thing you want to do as bed is beckoning, however, we all took and passed all the tests meaning that we could all help gather all the specific areas of the reef check.

Before we started collecting the actual data, we had a practice run, which was fun as well as interesting, it brought to life the training, once we had practiced giving back the data gathered to Rita, we were all looking forward to getting down to the business of data collection.

We managed to help provide data on 5 reefs, all of which Rita fed back into her computer at the end of each dive. We all took turns on collecting different data and having specific roles to complete. Hugely enjoyable and a great deal of fun plus we learnt a lot of new things.

Both Mike and myself are regular divers diving as many weekends as we can and as a dive master and Instructor, both felt before this adventure we were good and considerate divers. This week's training gave us both a great deal of learning:

- Our buoyancy improved considerably, trying to note down data underwater whilst hovering over hard coral is not easy, our new understanding of the impact of an accidental fin/coral collision made us doubly cautious and careful.
- As the data collection required time and moving slowly over the coral, we started to see amazing creatures we had missed before in our haste – the hidden coral crab, nudibranchs of multiple colours hidden in plain view all were missed to us previously. I think we always considered ourselves to be slow divers, hanging back from the pack of speedy divers all in a rush, but now we have slowed down once again and are taking our time to take in the smaller critters relying on the healthy reef to survive.

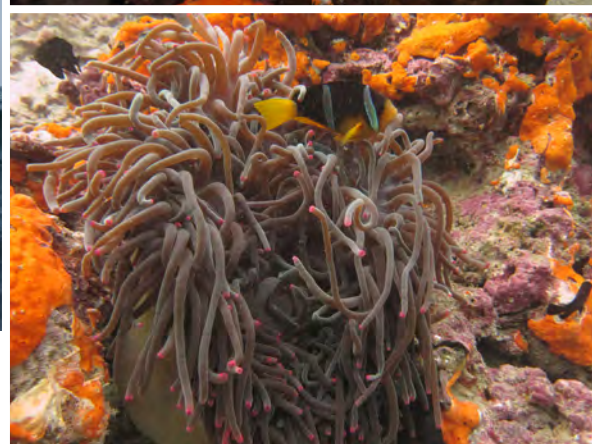
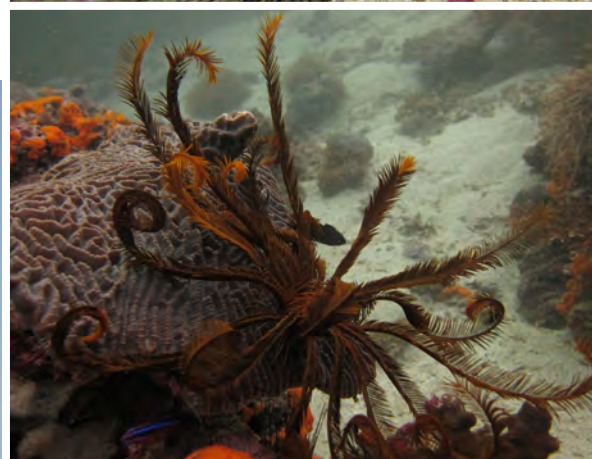


- We have become safer divers, diving regularly with divers of varying levels keeps you more aware of the importance of safety both above the water whilst trying to kit up in a small area all at once and below the water. The importance of a complete buddy safety check (regardless how many times you have dived together) was reminded to us on a couple of occasions.
- Time management and organisation of the dive equipment area. Lazy dives required the team to be ready at pretty much the same time, not easy when working in a small area, slow equipment assembly impacted the rest of the group. When taking part in the reef checks themselves, given all the different data needing to be collected and everyone's air consumptions, we needed to follow quite strict timings, entering the water a certain number of minutes after the team before us ascended – which we got down to an art by the end of the trip, but it did cause a couple of issues early on.
- Wafting – Ok, let me explain, hard coral often looks, to the uninitiated, to be soft coral, the polyps make it look to a newbie like ourselves to be soft coral, in fact the polyps are part of the hard coral sourcing sunlight and food particles. You can check if its hard or soft coral by wafting your hand over the polyps, if they retract into a hard calcium shell, then they are hard coral, if not and they remain swaying in the current then its soft coral. Trust me, for the first 5 days of this expedition, you are seen to be wafting everything under water just to check if its hard or soft coral.

We ended the trip with one lazy dive or snorkel (depending on flight times) at Telegraph Point. This was and probably still is a popular snorkel trip location. After spending time diving on sites that were pretty well protected in a healthy state, this dive was like diving a war zone. I know I sound dramatic, but it was heart breaking seeing such devastation under water; the impact of people walking over corals, destroying 100's of years of growth through non information. A huge boat battery laying on the silted ocean bed, dead coral as far as the eye could see, no wafting required here, nothing was living! A few families of fish were swimming around, probably as upset as we were at the impact us humans have inflicted on their home. After diving such beautiful reefs, it was a wakeup call for us, and really brought home the information and learning we had gathered.

After a slow chug back to the port, it was time for our last lunch as a group before we all either boarded the minibus back to Dubai or started separate trips exploring the above water world of Oman. Sad goodbyes at the port, followed by further sad goodbyes back in Dubai, but new friendships have been formed. An excellent and thought provoking trip, we had an excellent time and hopefully helped Rita and Biosphere gather extremely important data. We all left the trip with a better understanding of the human impact on our reefs and will be advocates of how we should and can help maintain healthy reefs.

Thanks to all involved in the organisation, we look forward to diving with Biosphere and EDA again soon.





# SURVEYING AND SAFEGUARDING

CORAL REEFS & WHALE SHARKS OF THE MALDIVES ARCHIPELAGO – BIOSPHERE EXPEDITIONS

FEATURE **RITA BENTO AND MATTHIAS HAMMER**

An area of 90,000 sq. km with 26 atolls and around 1190 islands with top-quality diving options is the best description of a divers' paradise. The Republic of Maldives is well known by all of us divers, because we've been there or maybe because it is still in the to-do list of places to dive.

Last September Biosphere Expedition started a new Reef Check expedition in this exquisite place with the objective to monitor the health of the Maldivian coral atolls, its fish and invertebrate communities so that informed management, education and conservation decisions can be made by the government and NGOs. Although many reefs in the Maldives are in a relatively pristine state and of high aesthetic quality, the Maldives Marine Research Station of the Ministry of Fisheries and Agriculture identified a need for further research and monitoring work as far back as 1997. Biosphere Expeditions is addressing this need and is working with Reef Check and the Marine Conservation Society in order to provide vital data on reef health.

As the Maldives are also known to be visited by whale sharks, Biosphere Expeditions could not miss this opportunity to join Reef Check to opportunistically record whale sharks that could be encountered during the expedition and take pictures of the gill area of whale sharks. Gill areas photographs are being used by the Maldives Whale Shark Research Programme to record presence/absence of whale sharks in the archipelago. Photos of the markings in and around the gill/pectoral fin areas are unique (like a human fingerprint) for each individual. The Maldives Whale Shark Research Programme can then match one individual's unique markings with the photographic record and add that image and the whale shark's location to their database, and see if it has been recorded before, and from where. This will then allow conservationists at the Maldives Whale Shark Research Programme to map where individual sharks go, how often they are recorded at individual locations, and whether further protection mechanisms are needed for individual hotspot locations.

Although Maldives is well known for the dives done in the outside reef and channels, or kandus, where the currents are assertive and

vast schools of fish feed; in order to collect Reef Check data our dives had to be done most of the time in the more quiet and shallow waters of these atolls, the thilas, sentinels of rock that rise from the ocean floor to just a few meters from the surface.

The expedition ran for two weeks with two different teams of 16 divers each week. Volunteers came from diverse countries such as Germany, UK, Australia, China, the USA, Portugal, Malaysia, Russia and the UAE, but all with the same purpose, to help achieve the Biosphere Expeditions objectives and help conserve the Maldives coral reefs.

The Reef Check training started at Baros Thila in the Malé Atoll, where all the volunteers got their classroom and underwater identification classes. After a handful of exams and practice dives, the team was finally ready to start collecting the valuable Reef Check data where fish, invertebrates, substrate types and impacts are counted. The expedition continued in the Ari Atoll, making our first stop at Rashdoo Region to do a couple of dives in Rashdoo – Madivaru dive site. The coral growth at this site is amazing as well as the amount and variety of fish: damselfish, butterflyfish, triggerfish and fusiliers, and of course as the name suggests madi, or manta rays, are also common in these waters. The team could not leave this dive site without trying a 5am night dive to look for the Hammerhead sharks (*Sphyrna lewini*) that rise in the early hours of the morning to more accessible depths. Unfortunately after an exciting and at the same time relaxing hovering at 30 meters for 20 minutes, the team wasn't awarded with the presence of these impressive animals, but promises of a return to the quest for hammerhead sharks was made by all the team.

The trip continued to the North Ari Atoll and the Gangahi region where the rest of the surveys were completed and plenty of time was left for a few "lazy" night dives. The expedition ended in South Ari Atoll (Alifu Dhaalu) near the Sun Island for a full day of whale shark searching. After a few hours looking into the blue, under sun and rain, the team was able to spot two juvenile whale sharks, one female of 5 meters and a male of 3 meters. Team members jumped into the water

and according to the training they received on the first days of the expedition, pictures of the gill area, measurements and sex identification was made without disturbing the animals.

The photographs of the whale sharks were sent to the Maldives Whale Shark Research Programme and a positive ID of the juvenile male whale shark was possible. We found out that his code name is WS036 Duncan and that he has been spotted in the Maldives since 2007 and he is a regular on this reef. This juvenile was also one of the sharks that the Maldives Whale Shark Research Programme satellite-tagged back in 2008 and they were able to see that he made a considerable round trip to the Laccadives, off India, and back to South Ari in less than 3 weeks.

The data collected in the Reef Check surveys will be used at international, regional and national levels to provide a 'status report' on the health of Maldivian reefs. At the national level, it will be used to help make informed management and conservation recommendations and at the moment the data is being analyzed by the team scientist, Jean-Luc Solandt, and we can't wait to know the results.

On this project Biosphere Expeditions is working with Reef Check, the Marine Conservation Society, the Maldives Marine Research Centre of the Ministry of Fisheries and Agriculture, the Maldives Whale Shark Research Programme and the MV Carpe Diem. Data will also be used in collaboration with the Global Coral Reef Monitoring Network and the University of York, which has a department of conservation. Biosphere Expeditions long-term dataset is not only of interest to conservationists working on monitoring the global status on reefs, such as those from the United Nations Environment Programme, the World Conservation Monitoring Centre and the International Coral Reef Action Network (ICRAN), but more locally too, especially as regards the effectiveness of current Maldivian Marine Protected Areas in their ability to protect and recover significant numbers and biomass of commercially important finfish. The project is generously supported by Soneva through the Six Senses Resorts & Spas Social & Environmental Responsibility Fund.



# REEF CHECK TRAINING

## IN THE MALDIVES ARCHIPELAGO WITH BIOSPHERE EXPEDITIONS

FEATURE AND PHOTOGRAPHY **NICOLA BUSH**



When I was given the opportunity to join the Biosphere Expeditions Maldives Reef and Whale Shark expedition I was in two minds... As I had been diving for less than a year, my main concern was what I would actually be able to offer to an expedition trip. On the other side, I was ecstatic at the thought of sailing around the atolls while stopping off at some of the world's best dive sites! Was this an opportunity too good to pass up?

As I spent a few days reading over the expedition information pack, my mind was put to rest at the fact that we would be spending time with Reef Check trainers. These trainers would give us the tools and information needed to be able to gather data and by the end of a few days, be certified Reef Checkers! So with all my questions answered, I packed my bags and hopped on a plane. Arriving in the Maldives I was amazed by the simplicity of finding a water taxi to Malé and meeting the Biosphere team and other volunteers in a local hotel. With introductions done and a briefing that took no longer than 30 minutes, we were off to the luxurious Carpe Diem; our luxurious yacht for the next 7 days. Luxurious it was! An amazing yacht which was both luxurious and spacious and I would highly recommend!

We didn't waste any time before setting sail to spend the first few days in the Malé and Rasdhoo Atolls. It was here that we would have a few practice dives and become certified reef checkers. The following day was mostly spent in the classroom learning the reef check terminology, communication tools and of course what exactly we were looking out for.

In the afternoon we did our first dive. Now considering I am new to diving and the Musandam is the most exotic diving I have experienced, I was blown away! Our first dive

was against a wall which plummeted down as far as you could see. Currents were easy and we slowly glided along the wall while White Tips and Grey Reef Sharks cruised a few meters below. A curious Giant Napoleon Wrasse also came and stayed alongside us for a while. Giant coral fans and table corals were

dominating the wall while the abundant shoals of various reef fish above were enough to block out the sunrays at times. It was simply amazing!

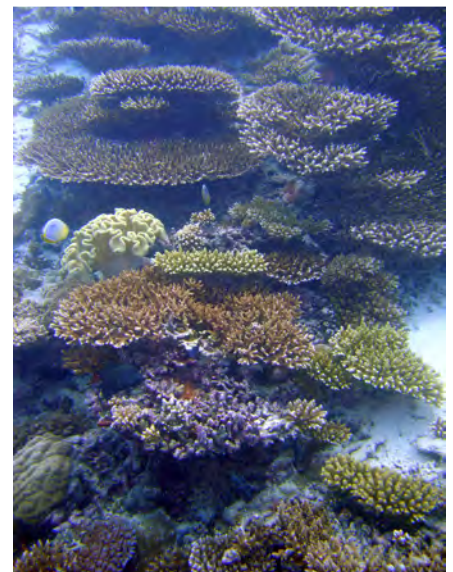
The following 2 days were spent both in the classroom and doing training identification dives. They said that after being certified as a Reef Checker, you would never look at the reef in the same way... they were right! At the end of the 2½ days of training we were all certified and ready to start collecting data.

The following days were spent conducting 3 reef check dives a day, plus either a fun night dive or additional day time pleasure dive. We covered quite a lot of ocean in the week, diving in Malé, Rasdhoo and South Ari Atoll's. Covering the distance between the atolls was also an adventure and we had several encounters with Dolphins and Manta Rays, where we were lucky enough to be able to stop the boat and swim alongside.

The final day in South Ari Atol was spent cruising up and down a well known reef that is famed for Whale Shark sightings. Logging information and photographing the Whale Sharks was the main focus for the last day. We were lucky enough to spot 2 whale sharks within 2 hours! A great opportunity to snorkel along with them while gathering the required information to register them with the Maldivian Whale Shark Authority.

The trip overall was brilliant! Diving conditions were perfect and we managed to tick everything off our lists that we wanted to see. Aboard the boat there were a very dedicated team who took care of us and also have to be thanked for making the trip so enjoyable!

A highly recommended holiday option and with a flight time of only 4 hours, I've already booked to go back!





# CLEAN UP ARABIA 2011

MAIN EVENT HELD AT LE MÉRIDIEN AL AQAH BEACH RESORT AND SPA

PHOTOGRAPHY **ALLY LANDES**

Clean Up Arabia 2011 has seen yet another successful year! EDA's main event held at Le Méridien Al Aqah Beach Resort and Spa had an impressive turnout of 284 participants. We thank the volunteers who stood in to organize the morning's registration posts for memberships, beach clean ups, dive clean ups, ICC cards and T-shirts and caps. It was smooth sailing all the way. We couldn't have done it without you!

The day started at 8.30am with a beautiful blue sky in the gardens of the hotel grounds. A breakfast buffet, tea and coffee awaited all the guests, friends and families arriving, giving everyone time to register their type of clean up, collect all necessary material needed and for the divers to kit up before the days welcome and instructions from EDA's Executive Director, Ibrahim Al Zu'bi.

Lunch was served at midday in time for the groups to get back to base, kick back and



### SPONSORS:



relax the rest of the afternoon, lazing in the sun followed by a refreshing swim in the sea before heading back home knowing that great team work effort was put into another successful yearly clean up.

### CLEAN UP WINNERS

Congratulations to the following Clean Up Members for their trash collection numbers. We took into account numbers of people versus items collected in order to come to fair results. They have each won a Body Glove Rash Vest.

#### BEACH TEAM TOTAL 487

Mariven "Bheng Ranola"  
Darling Salvador  
Michael Barnedo  
Jonah Libalib  
Ymhenia Starija  
Mirel Malic

#### UNDERWATER TEAM TOTAL 86

Joe Acosta  
Anthony B. Allenid  
Matt Bayer  
Leo Buntas





## SUPPORTING PARTNERS:



## PARTNERS:



FUJAIRAH				ABU DHABI	
TYPE OF TRASH	UNDERWATER	SHORELINE	TOTAL	TYPE OF TRASH	SHORELINE
Bags (paper)	4	127	131	Bags (paper)	2
Bags (plastic)	148	211	359	Bags (plastic)	115
Balloons	0	10	10	Balloons	2
Beverage Bottles (plastic)	64	216	280	Beverage Bottles (plastic)	164
Beverage Bottles (glass)	12	68	80	Beverage Bottles (glass)	63
Beverage Cans	28	137	165	Beverage Cans	90
Caps, Lids	13	204	217	Caps, Lids	122
Clothing, Shoes	12	45	57	Clothing, Shoes	21
Cups, Plates, Forks, Knives, Spoons	11	250	261	Cups, Plates, Forks, Knives, Spoons	87
Food Wrappers/Containers	36	174	210	Food Wrappers/Containers	134
Pull Tabs	0	25	25	Pull Tabs	57
6-Pack Holders	0	5	5	6-Pack holders	0
Shotgun Shells/Wadding	0	4	4	Shotgun Shells/Wadding	0
Straws, Stirrers	0	95	95	Straws, Stirrers	52
Toys	1	11	12	Toys	4
Bait Container/Packaging	11	1	12	Bait Container/Packaging	4
Bleach/Cleaner Bottles	0	6	6	Bleach/Cleaner Bottles	38
Buoys/Floats	0	0	0	Buoys/Floats	0
Crab/Lobster/Fish Traps	11	13	24	Crab/Lobster/Fish Traps	0
Crates	1	0	1	Crates	1
Fishing Line	32	9	41	Fishing Line	7
Fishing Lures/Light Sticks	9	42	51	Fishing Lures/Light Sticks	16
Fishing Nets	17	33	50	Fishing Nets	0
Light Bulbs/Tubes	2	3	5	Light Bulbs/Tubes	5
Oil/Lube Bottles	11	5	16	Oil/Lube Bottles	17
Pallets	0	0	0	Pallets	0
Plastic Sheeting/Traps	2	20	22	Plastic Sheeting/Traps	25
Rope	20	87	107	Rope	43
Strapping Bands	0	17	17	Strapping Bands	13
Cigarettes/Cigarette Filters	0	468	468	Cigarettes/Cigarette Filters	443
Cigarette Lighters	0	10	10	Cigarette Lighters	22
Cigar Tips	0	0	0	Cigar Tips	15
Tobacco Packaging/Wrappers	0	22	22	Tobacco Packaging/Wrappers	7
Appliances (Refrigerators, Washers, etc.)	1	0	1	Appliances (Refrigerators, Washers, etc.)	6
Batteries	0	1	1	Batteries	2
Building Materials	5	45	50	Building Materials	66
Cars/Car Parts	2	1	3	Cars/Car Parts	20
55-Gallon Drums	0	0	0	55-Gallon Drums	2
Tires	1	3	4	Tires	0
Condoms	0	6	6	Condoms	0
Diapers	0	10	10	Diapers	4
Syringes	0	0	0	Syringes	0
Tampons/Tampon Applicators	0	3	3	Tampons/Tampon Applicators	0
<b>TOTAL</b>	<b>454</b>	<b>2387</b>	<b>2841</b>	<b>TOTAL</b>	<b>1669</b>













UNDERWATER PHOTOS BY **PRECIOUS JOY AZUL**





# CLEAN UP ARABIA – ABU DHABI

FEATURE **KATHLEEN RUSSELL**, EDA ABU DHABI COMMITTEE COORDINATOR

PHOTOGRAPHY **ALLY LANDES**



## SUPPORTING PARTNERS:



Clean Up Arabia in Abu Dhabi was again a huge success under the patronage of HH Sheikh Hazza Bin Hamdan Bin Zayed Al Nahyan leading the way and taking action along with HH Sheikh Yass Bin Hamdan Bin Zayed Al Nahyan on Friday 18<sup>th</sup> November 2011. Both Sheikh Hazza and Sheikh Yass along with Ibrahim Al Zu'bi, EDA Executive Director took the plunge in the marina and brought up 10kgs of trash alone. In addition, over 450 volunteers and partners from The Environment Agency of Abu Dhabi, Center of Waste Management, EDA, CNIA, GASCO, ZADCO, ADGAS, ACS Girl Scouts, Environment For Friends Group, Al Mahara Diving Center, Lavajet and the diving community gathered in Abu Dhabi in Mina Zayed.

The port is a popular destination for fish auctions as the fish market is located there. Plenty of fishermen dhows are stationed at the port and the fish market auction is very active in the mornings. This site was chosen because there was a lot of debris underwater by Mina Port and on Lulu Island. The debris gets washed up onto the Lulu Island shores and buried under the sandy beach making the beach unsafe for people to walk on and unsightly.

Divers entered the water from the marina along with kayakers and pulled up an amazing amount of marine debris. Over 600kg of trash was pulled out of the water and from Lulu Island. This included lots of plastic bags, plastic plates, beverage bottles, cans, construction materials,

food packaging, marine supplies, abandoned fishing lines, nets and even baby diapers. All the volunteers acknowledged that a lot of the waste had come from the land or beaches by people. The children remarked how "people of the community should stop littering or throwing trash into the sea." After the clean up volunteers were treated with some tasty refreshments and food provided by GASCO. CNIA provided boat safety and rescue personnel on site and ZADCO provided ambulance services for the event.

We applaud the EDA Team for their commitment and dedication as after the Abu Dhabi clean up, they drove to the east coast to get ready for the clean up on Saturday 19<sup>th</sup> November.

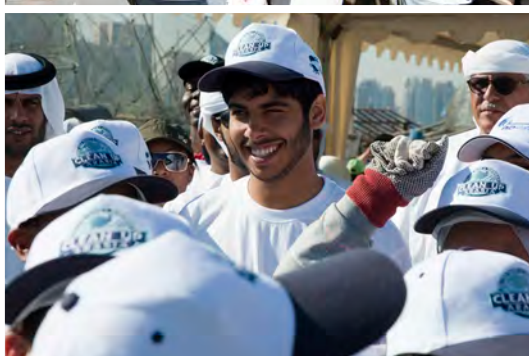
We look forward to the next Clean Up Arabia and hope volunteers will spread the message to the rest of the community to keep our beaches and oceans clean and safe for everyone and all living species.













## FEATURES

# CLEAN UP ARABIA DUBAI – ATLANTIS DIVE CENTRE

PHOTOGRAPHY **SIMONE CAPRODOSI**

It could not have been a better day. The sea was perfectly calm and beautifully blue with the sun glistening off the surface.

The mission was to dive off the breakwater of The Palm Jumeirah. No one has dived there before, but we figured that with the storms we get, debris and rubbish might have collected there.

Huge thanks must go to Captain Ali who

works for World Security. He brought three boats and a team of deck hands to assist in the clean up. So with the boats loaded, blue lights flashing and our EDA T-shirts on, we headed off for a very short boat ride.

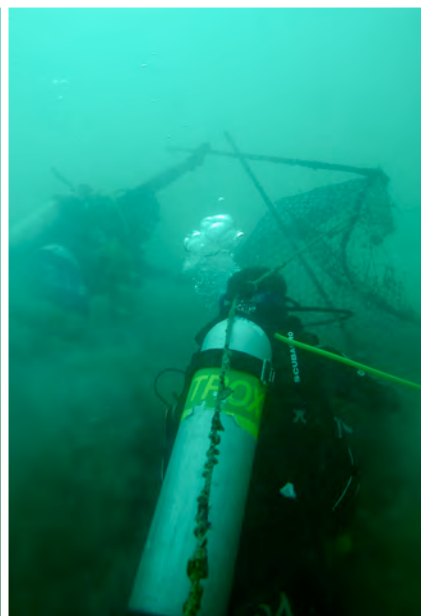
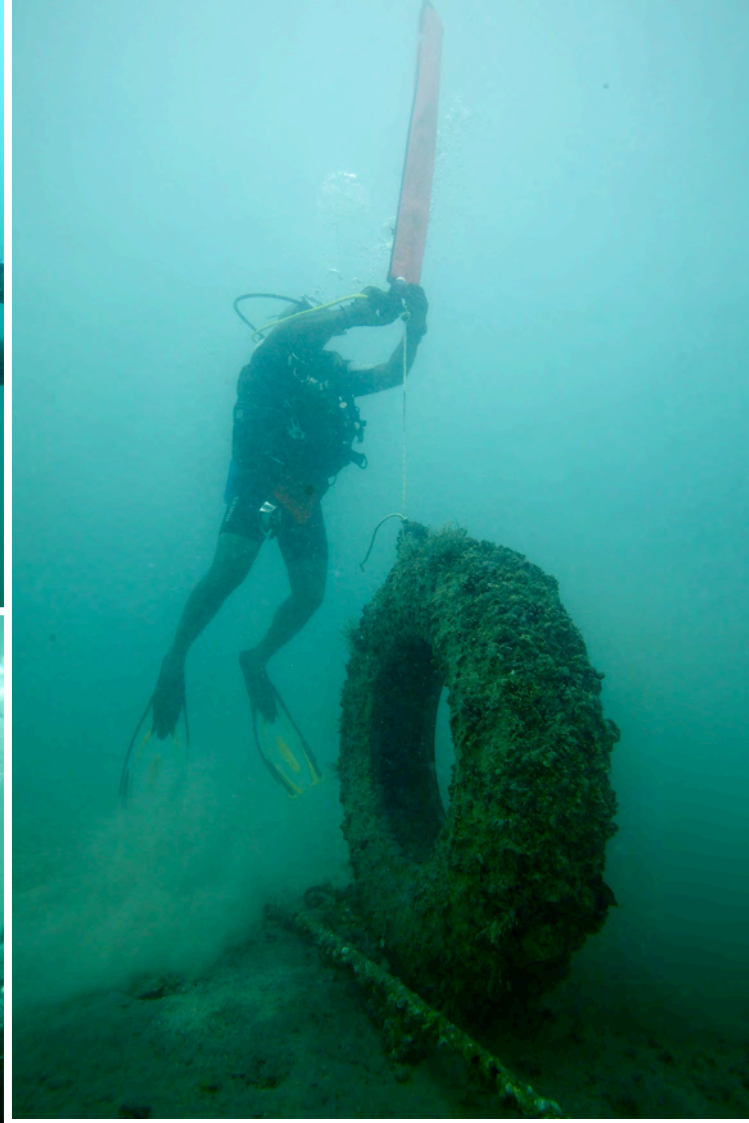
It was not long before lift bags were hitting the surface with everything from truck tires, fishing pots and scaffolding poles. The dives were a great success, a lot of debris was brought to the

surface. It also turned out to be a very enjoyable dive with lots of marine life around us.

A great day with great friends and new friends being made, a lot of laughs and the knowledge that whilst having fun, everyone who joined in the EDA Clean Up Arabia gave something back to the environment. Huge thanks to everyone who gave up their time to join the EDA Clean Up Arabia.









# BEACHNIX, THE BIG LOVE BEACH BRAND

FEATURE LUKE BEAVER



A new beach brand is starting up this year dedicated to promoting ocean conservation and the eradication of using sweat shops around the world. Beachnix's co-founder, Davinia Mehta (Dee to her friends) has a holistic vision for her company – one that strives to help protect the planet's oceans and eradicate human exploitation in the labour market.

Dee grew up in Dubai and spent her formative years, just out of school, working at various dive schools and soon became a Dive Master. Her love of the ocean and its beaches runs deep. So deep in fact, that as a teenager she played a major role in hosting, in conjunction with the fabulous EDA, the Clean up Arabia program which was so successful

that it has become an annual event still running to this day. Today Dee lives in Australia after completing her Exercise Science degree on the Gold Coast.

This is the story of how Beachnix, the big love beach brand, came to be...

Walking along her home beach of Miami on the Gold Coast, Australia one day a little while ago, Davinia started to have a feeling. Deep in a reverie, she gazed around her: lovers holding hands; the surfers riding the ocean's energy; kids splashing in the shallows and fishermen throwing lines in the deep pools off the water's edge, she trembled at another vision which, in juxtaposition to the scene before her, showed the same scene with an ocean of murky water lining an empty, dirty beach filled with pollution. Something in her awakened strongly, right then she quietly, and with a sharply focused intent, pledged that she would do something tangible to ensure that the idyllic aliveness of the oceans and the beaches will be preserved for posterity.

Later that day Dee was back at her desk thinking about the creep of consumerism and how even the beach culture, once a simple escape from facade and shallowness endemic in today's society, has been targeted by surfing superbrands, splendidly cool sunglass companies, and innumerable clothing conglomerates – all out to sell the beach and ocean lifestyle with precious little energy put toward the beaches themselves. Still charged by her vision, she opened her sketch pad and started doodling.

First, there was a simple horizon with squiggles representing waves, then a silly little head with a hat, then a surfboard, and finally the words, "surfing holds the key to universal peace", were scribbled at the bottom. Dee had created the Little Dude! And Beachnix was born.

After a few renditions of the Little Dude his final avatar was finalized, his name was shortened to Lil Dude, and the concept of a brand of shirts that highlights the simple joys of the ocean had been hatched. A year or so later and Beachnix is ready to launch its first line of shirts.

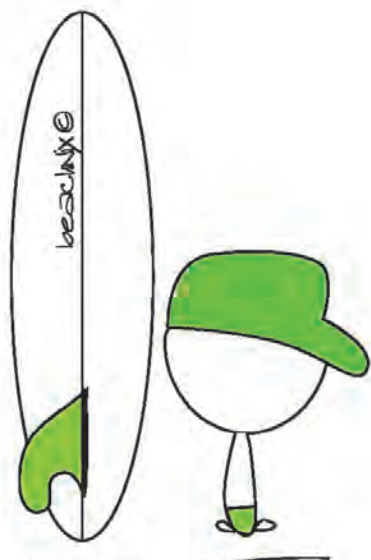
Beachnix aspires to be more than a cool shirt sitting on the shelf. The name itself pays homage to the late Beat Generation (Beatniks) poets who, through unconventional thought and individuality, gave rise to a host of social reform movements in the 50s and early 60s. With individuality and social conscience high on the agenda, this small company has big hopes for its future.

All of Beachnix's material is organically grown and the labour used to create the shirts is based in Sydney, Australia where the work conditions are sweatshop free. All the dyes used in Beachnix products are the most environmentally friendly in the industry. A percentage of all sales will be donated to a select group ocean conservation organisations.

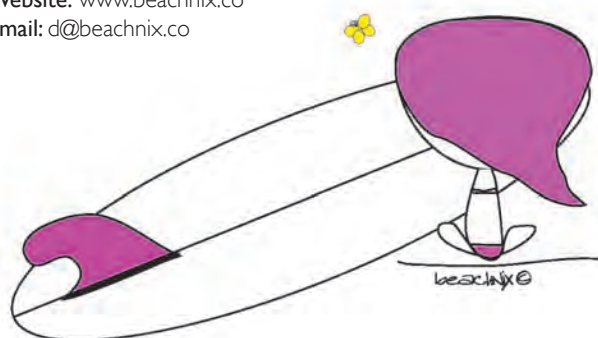
Beachnix, the big love beach brand, is set to be launched by the end of the year.

**Website:** [www.beachnix.co](http://www.beachnix.co)

**Email:** [d@beachnix.co](mailto:d@beachnix.co)



surfing holds the key to universal peace





# THE REVOLUTION HAS BEGUN

THE RECREATIONAL REBREATHER IS WITHOUT A DOUBT THE WAY OF THE FUTURE FOR RECREATIONAL DIVING  
FEATURE **JASON SOCKETT – ATLANTIS DIVE CENTRE**

As many of you will know, PADI have launched their Rebreather and Advanced Rebreather Courses. The courses have been written by the legends Kevin Gurr, Jill Heinerth, Richard Pyle and Martin Robson.

For me the journey to become a PADI Rebreather Instructor has been an amazing experience. Earlier this year I completed the Poseidon user course. Traveling to the UK to learn with one of the world's best Technical and Rebreather Divers, Jack Ingles, a legend. One of the two Poseidon's test divers for the MKVI since conception. What better person to learn from than the man who has been behind the unit since the start and has ran expeditions all around the world.



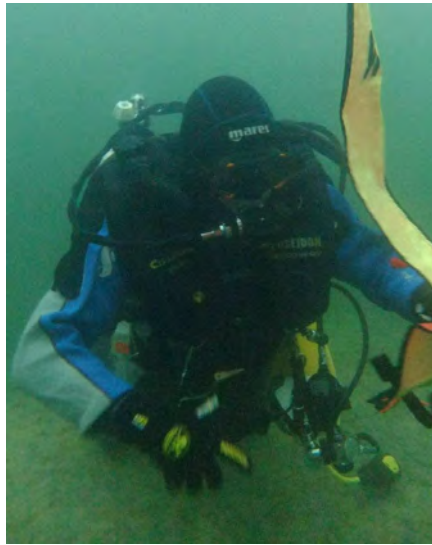
Since completing the course there was not a day I was not diving on the unit be it in the Arabian Gulf or the Indian Ocean and in our pools perfecting my skills. I was having so much fun filming marine life closer than I have ever got to before.

In September I decided to work towards becoming a PADI Rebreather Instructor. But first I wanted to join Jack on some more dives. I called him up and before I knew it I had booked my ticket. Jack asked me if I would like to train with him to become a PSA Instructor and help him run a course, in Stony Cove!!! After 14 years I have finally dived Stony Cove.

I was going to be in the UK for two weeks, jumpers, dry suit and more jumpers were packed.

I arrived in the UK and drove to meet Simon the owner of Poseidon, UK. I attended the Service Technicians course. I spent the day in the classroom, taking apart the units, rebuilding them, taking them apart again so that I can honestly say I now know that unit inside out, literally. It was a great day and the passion Simon has for the MKVI is contagious.

That night I drove to Leicester and checked into a lovely B&B whose whole existence is to home the divers of Stony Cove.



The next morning I met with Jack to go through my course with him. His students arrived a little while later and it was straight into the course. Jack teaches the Rebreather course with such enthusiasm, instantly he had the students hanging on every word. By lunchtime we were assembling the units for our first dive. A shallow dive to allow the students time to get used to the units. Pretty much working as a DM for Jack, whilst he taught them some of the basic skills, go to BOV!!! These units are so good that if it thinks, 'hang on I am not happy' it tells you to go to Bail Out and surface. Big thing to remember these are Recreational Rebreathers.

Day Two, arrived and everyone was so excited to spend the whole day diving. In glorious sunshine we set up the units and donned the dry suits. Then Jack sprung it on me... 'Jas why don't you do all the demonstrations

and I will be your assistant?' With a confident smile and shaking knees I agreed! I knew it was coming, it was part of the course, it was not demonstrating I was nervous about... I have Jack Ingles as my DM... MY DM!!!

After 4 days of training with Jack, I felt very confident for my main objective of becoming a PADI Rebreather Instructor. To complete that, it took me to Hull to meet with Martin Ainsworth a PADI Course Director and PADI Rebreather Trainer. I was going to do the course with a great friend of mine, Adam Wood who I had met when I did the first course with Jack back in Wales and a guy called Brian who I had met on the technician's course.

It's a bit colder in Hull, the sun had gone so was very glad the day started with a cup of Tea! Martin's team could not do more to help if they tried. For the next three days, I was fed home made cakes, endless cups of tea and thankfully Martin's wife Sharon even started making me hot Bovril drinks to help warm me up, I don't mind admitting it I hate the cold!!!

The first day we spent in the classroom going over the PADI Rebreather courses with a fine comb and magnifying glass. What is great is that Martin does not leave any stone unturned, we did not move on until we all understood every aspect of the course. It was also great to hear that we were on the very first course in the UK to become a PADI Rebreather Instructor. My 15 minutes of fame, I was the first person in the UK to become one.

Day Two arrived with glorious clouds, rain, and wind... Great!!! We all got kitted up, me in dry suit, hood, gloves... Martin in a 3mm wet suit!!! Is he mad, the answer; No but Yes!!!





# FEATURES

Just like in the classroom, Martin demands perfection and we descended down onto the platform to start our skill circuit. Thankfully I had practiced hovering in our pools in Dubai in my dry suit, otherwise that could have been embarrassing. 91 minutes later after doing the skills and going on a dive of his private quarry we surfaced. Lips blue... that 5<sup>th</sup> cup of Bovril was most welcome.

In the afternoon we all took it in turns to run our particular sections of the course both in the water and in the classroom, acting as students for each other. It gave me great empathy to the IDC candidates I had waiting in Dubai, now it was my turn to be marked and assessed.

Day three arrived to yes more rain, wind, clouds but some lovely cups of tea! We worked with Martin throughout the day going through simulated parts of the course. Culminating with my last skill I had to do, the Rescue. I am glad to say Adam survived.

Then the moment of truth, had I passed? With a huge smile, Martin gave me the best news possible... I could go inside and warm up!!! No really I had past, I did it and felt over the moon to have completed a most exhilarating journey.

SO NOW IT'S YOUR TURN TO HAVE THE FUN! Learning to dive on the Rebreather.

Paul Cunningham has also completed his PADI training and is also a PADI Rebreather Instructor and Trainer. So between us, we are very excited to get you started. The response and feedback has been overwhelming. November both of us were fully booked.

## So how do you get started? The prerequisites are:

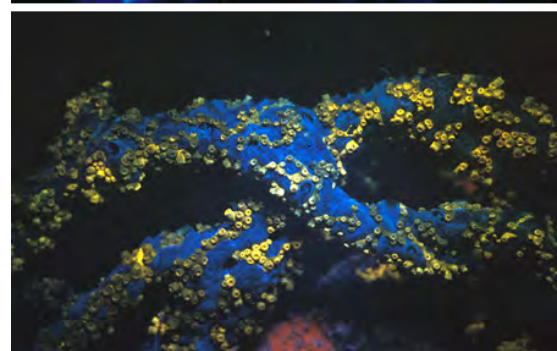
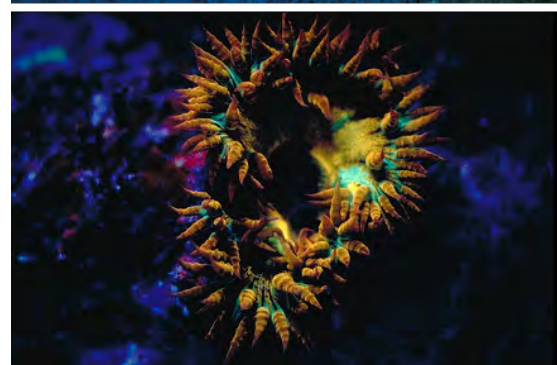
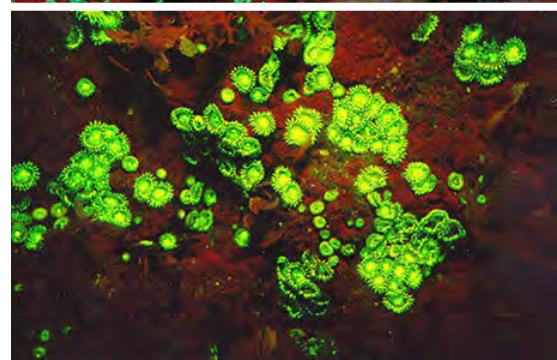
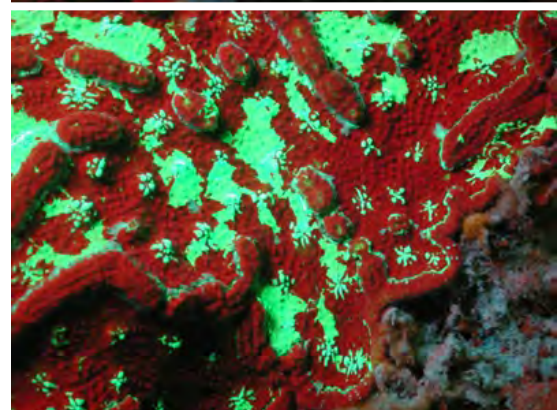
**PADI Discover Rebreather** – OW diver (or equivalent), 15 logged dives, 18+ years old.

**PADI Rebreather Diver** – OW diver (or equivalent), EANX certified, 25 logged dives, 18+ years old.

With the festive season coming, it is a great opportunity to buy someone who has everything, something they may not have yet? I promise you, you will love diving on a rebreather. Look forward to seeing you underwater. For those of you who celebrate Christmas, have a great Christmas!



The kit and training at the Atlantis Dive Centre





## A BRAND NEW SCIENCE... A UNIQUE DIMENSION

FEATURE **GARY MORRIS** – [WWW.FLUORESCENCEAWARE.COM](http://WWW.FLUORESCENCEAWARE.COM)



Come and experience a new dimension in diving. It is so new and exclusive that more people have seen the Earth from space than seen coral in this totally new light! Fish suddenly speak and coral communicates through fluorescence.

You can now discover something very different and magical. Taking you right back to premier ocean discovery, the PADI / Project AWARE course is called "Fluorescence AWARE Diver".

Not to be confused with phosphorescence or bio-luminescence, fluorescence is the absorption of one wavelength of light (or colour) and the re-emission of another totally different wavelength of light (or colour). A fluorescent object under white light reveals its true colour but, under almost ultraviolet (UV) light it absorbs the blue and re-emits a fluorescent colour, transforming the blue into a bright glowing, totally different colour.

Underwater marine animals and corals that do fluoresce, have the ability to convert one colour into another entirely different colour!

Dr Charles Mazel PhD and leading Fluorescence Research Scientist and inventor of fluorescence technology: "The odds of you going in the water and finding something, seeing some animal fluorescing, that no-one else in the entire history of the universe has ever seen is probably over ninety percent, anywhere in the world! Simply because so few people have done this".

The true reason for fluorescence in corals still remains unclear today however; the reason for fluorescence in more complex creatures is completely obscure. Fluorescence extends all boundaries in understanding and still now remains as controversial as it is fascinating.

Why are marine animals such incredible colours? It has been conclusively proven that, "colour is the prime cryptic language of the fish". Fish seem to change colour and pattern to express emotion and mood. What is the integral role that fluorescence plays in marine

animals daily lives? Come and find your own answers to the ultimate questions of how and why they do this.

Instructors always talk about being in the business of "transformation", this course delivers. Become a "pioneer" and be the first to discover something no-one else has ever seen! Witness extraordinary behaviour. It is a brand new science and mind-blowing phenomena

the world's leading research scientists are still striving to understand! Experience the magic of underwater fluorescence – "the inconceivable ability of marine animals to change one colour, into another"!

There are new creatures being discovered every dive, every day. Although new discoveries are made, with each answer comes more questions. In an environment dominated by blue, bright colours are quickly absorbed in just a few metres but, fluorescence is a way to maintain bright colours.

Freestyle Divers is proud to be the first place not only in the UAE but the World to offer the new PADI/Project AWARE Specialty – Fluorescence AWARE Diver.

Freestyle has been open for 6 years now as a family run and oriented business and we are committed to offering the highest quality diver education. With the opening of our new store in Dubai, we are able to offer more flexibility in our course structure as well as more retail space. We stock ScubaPro equipment, including wetsuits, BCDs, regulators and assorted dive equipment. As well as doing courses up to Assistant Instructor, we offer day trips to Musandam for snorkeling, diving or just sailing and daily trips around Fujairah. We also like to have fun with our divers, often hosting planned and impromptu barbeques on Friday nights. Our prime location at the Royal Beach Hotel, right in front of Dibba Rock means that we have some of the best access to dive sites on the East Coast.

With Gaz joining the team and offering this new and exciting course, Freestyle is showing that we remain at the forefront of diving in the UAE.

Gaz Morris from Wales (UK) who wrote the course is the newest member of the Freestyle team and is the only instructor in the world to be able to certify in this specialty. He is a PADI Master Instructor, EFR Instructor Trainer and holds 17 specialties. Gaz is proud to be sponsored in diving by FourthElement. "I am

not just a fad, I am a trendsetter" says Gaz. He is also associated with Dr Charles Mazel.

### WHAT TO EXPECT IN THE COURSE OVERVIEW

- Minimum age: 12 years
- Maximum depth: by divers certification level – recommended 18m
- Number of dives: 2

### PREREQUISITES

- A PADI Open Water Diver (or qualifying certification from another training organisation)
- Previous experience of night diving with excellent buoyancy

### WHAT YOU LEARN

During two night dives you gain hands-on (okay, eyes-on) experience in looking for and identifying the fascinating fluorescence you see underwater.

- How to identify different Corals
- Use of specialist fluorescence equipment
- Have the option to find new recruit data and perhaps take your own underwater fluorescence photographic memories
- Knowledgeable Presentations

Gain knowledge from reading through your student workbook and answering the knowledge review

### THE COURSE

As the sun sets, you don your dive gear, slip on your scuba mask and bite down on your dive regulator. A deep breath and you step off the boat into the underwater night. Although you've seen this reef many times before, this time you drop into a whole new world and watch it come to life under the glow of your dive light.

### THE FUN PART

Introduce yourself to the whole new cast of critters that come out after the sun goes down. See your favourite dive sites from a whole new perspective at night.

Freestyle run all PADI Courses, mainly Discover Scuba Diving, Open Water Diver, Adventure Diving, Advanced Open Water, EFR and Rescue Diver. Also popular are many specialties which are an extension to your existing training. They offer practical certifications broadening your abilities and skills. These include 'Deep diver' enabling you to dive to 40m/130ft, 'Night diver' enabling you to do night dives, Enriched Air Nitrox and Wreck. Feel free to come down and get a warm welcome from all the staff at Freestyle Divers.

Don't fancy the whole specialty... No problem! Come and try it as an adventure dive.

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



# DIVE ABILITY

FEATURE **MATT COLLIARD (DIVE ABILITY ACCESS OFFICER)**

As disabled diver, EDA member Caroline Walsh has been involved in the promotion for diving for all for twenty years. For the last four years, she has been undertaking postgraduate research at the University of Kent exploring what encourages divers to take part in volunteering as part of the diving experience and what the specific factors are that affect disabled divers participation in such activities relating to marine conservation. As part of her research, Caroline came across a new and vibrant inclusive diving club called Dive Ability.



Dive Ability official launch at NEC Birmingham DIVE 2011. Photo by Les Piggott.

Dive Ability is a new charity whose mission is to introduce the beneficial and adventurous world of scuba diving to people with disabilities and/or disadvantaged backgrounds. We started off as a group of friends experienced in scuba diving (some with a disability) diving monthly in a swimming pool together, and mainly due to the drive and ambition of Andy and Lydia Wood became a charity in early 2011. In under a year, with the help of our generous supporters and members of the public, we have managed to raise enough funds to buy a mobile pool hoist to enable people with a very high level of disability to enter the water, much-needed scuba diving equipment as well as achieving Dive Ability's registration with the Charity Commission.

Our official launch took place at the International Dive Show, at the NEC in Birmingham where we had a stand near the try-dive pool. The launch was very successful, we made some very useful contacts, found some new supporters and potential dive instructors/volunteers as well as running a very successful raffle which raised over £1200 of much needed funds.

Our charity is user led, consisting of disabled and non-disabled committee members and trustees. Our monthly pool sessions near Alton in Hampshire are fully accessible, we can offer try dives, Open Water and Advanced Diving Qualification Courses etc to all abilities, taught by our highly experienced and qualified instructors. We also hold numerous social events throughout the year and arrange accessible dive holidays abroad to enable our members to discover the amazing array of sea life places like the Red Sea have to offer.

All our members are very ambitious and driven, presently our main goal is to get as many disabled and disadvantaged people aware of the many benefits scuba-diving has to offer and to have a go at it... We know that scuba diving gives you something to look forward to, a goal to aim at and a great sense of achievement, all of which are important in anybody's life. This can only lead to give people a greater sense of well being and higher confidence levels, which will enhance their lives in many other aspects, most importantly whilst having fun!

Our future aims include fund raising for a minibus to get all the equipment etc to and from the pool, we also see ourselves visiting dive clubs, schools etc nationwide with our mobile hoist to provide demonstrations and try dives but also to be in a position to provide information, guidance and even training so that such places can offer people with disabilities and disadvantages, scuba-diving as a viable activity in their local area. Being able to do that obviously takes a lot of time and money so we are constantly searching for sponsors to support us by kindly donating quality raffle prizes such as dive holidays, scuba equipment etc or in any other way they can, to allow us to fundraise successfully.

I'm a wheelchair user myself following a spinal injury 21 years ago, and have been diving now for six years. I looked into the possibilities of scuba-diving following several sessions of hydrotherapy, where I volunteered to be a 'guinea pig' for my physiotherapist's students... I got a lot out of it and enjoyed it immensely, and as a lot of my friends were diving at the time, I thought I would look into

it. Before long, with the right help, I did my first scuba dive in a swimming pool. Although very scary at first, the feeling of freedom and weightlessness I experienced was a revelation and I was hooked instantly. I was amazed when told that there was no reason for me not to take up diving, let alone, with the right support and expertise, be able to scuba dive in open waters such as the Red Sea. Within a year I had passed my IAHD Open Water in Sharm El Sheikh and six months later got my Advanced in Hurghada. Since then I have found that my confidence has grown ten fold and it has given me the motivation to try other adventure sports such as kart skiing, microlight flying and skydiving.

Thanks to the amazing bunch of instructors and volunteers that have helped me, we have managed to do over 50 dives together in the Red Sea including some world-famous ones such as Jackson Reef, Shark and Yolanda and the Thistleworm wreck; some in very tricky conditions. We also had a fantastic holiday in the Bahamas where we were fortunate enough, amongst other great dives, to scuba with 20+ Grey Reef sharks. We would love to dive into other areas of the world and are constantly looking for dive centres with the right facilities preferably within 'wheeling' distance of accessible accommodation.

Diving is now my main hobby, I am one of Dive Ability's committee members, and very committed to making people with disabilities aware of the many therapeutic benefits that scuba diving has to offer. I'm also very keen for interested new instructors and volunteers to take me into the water in order for me to show them the skills involved and needed to enable a disabled diver such as myself to dive safely with their help; more often than not, I find that they get as much out of it as I do!

Email [trydives@btinternet.com](mailto:trydives@btinternet.com)  
[www.diveability.org](http://www.diveability.org)







**BAHAMAS 2010**

Photo by Robin Taylor from Stuart Coves Dive Centre.

L-R: Lydia Wood, Matt Colliard, Andy Wood and Ann-Marie Groutage







# MARINEMAN MAKES A SPLASH!

FEATURE, IMAGES AND PHOTOGRAPHY © AND™ IAN CHURCHILL



**Diver and comic book creator/artist/writer Ian Churchill explains how Marineman went from childhood fantasy, to comic book reality.**

When I was young, I had two passions: superheroes and the underwater world. I would spend hours reading comics, admiring the art and drawing my own versions of my heroes. I was a member of the British Sub Aqua Club, very frustrated that at eight years old I was deemed too young to use an aqualung, even in the pool! My granddad encouraged my interest in marine life, and together we would watch in awe the old Jacques Cousteau documentaries. He gave me a book, 'The Sea - Our Other World' that came free with a box of teabags and had lots of cool information about the underwater world. It was almost inevitable that my two passions would collide, and so in 1977, Marineman was born!

Fast forward three decades and I've been illustrating comics for the likes of DC Comics and Marvel Comics for some 15 years and am an avid amateur diver, still interested in all things underwater and keenly aware of the fragility of our marine ecosystems. Marineman was still knocking around in my head – over the years I've periodically revisited the concept, costume, characters and story elements – and I decided the time was right to get my first ever creation out of my head and onto paper!

I wanted Marineman to stand out from the plethora of grim and gritty comic books gracing the shelves of comic stores the world over. I wanted to create the comic book I would have wanted to read as an eight year old – bright, shiny and optimistic – and get younger people reading comics and enjoying comic book art. At the same time, I wanted Marineman to be more than just a superhero, to be an educational tool who could inform readers about the wonders

of our underwater world as well as the dangers that face it, and hopefully encourage non-divers to take the plunge and start diving! Marineman's 'super powers' are essentially what is considered normal for underwater creatures. Steve (Marineman) Ocean, marine biologist and TV presenter, can breathe underwater, has webbed fingers to help him swim fast, body fat that enables him to withstand the intense pressure and cold of the oceans' depths, and echolocation abilities like a dolphin. As well as incorporating informational aspects into the story line – for example when Steve demonstrates tonic immobility in a lemon shark – I was also lucky enough to get interviews with real-life marine biologists, for use in a bonus section I called 'Oceanauts'.

Marineman has been a real labour of love. I designed it, wrote it, drew it and co-coloured it to make sure the finished product was everything I wanted it to be. The first issue of Marineman came out in December 2010 and the next five issues came out on a monthly basis to complete the first story arc, Marineman's origin story. In August 2011, the comics were collected into a graphic novel 'Marineman: A Matter of Life and Depth', complete with extra 'Oceanauts' interviews, pages of sketches from my early concept sketches to cover layouts and everything in between, and the few surviving pages of my original 1977 MARINEMAN comic!



In April I was astounded and excited to hear Marineman had been nominated for an Eisner award for 'best new series 2010' – the Eisners being the comic book equivalent of the Oscars in the movie world! In July, to coincide with the San Diego Comicon, the world's largest comic convention, Marineman was featured on the

cover of North America's Diver magazine, and at Comicon I was delighted to meet Marineman fans young and old, divers and non-divers alike. The UK's Sport Diver magazine then asked me to draw a Marineman cover for their October issue. I was nervous about exhibiting at the October DIVE 2011 show in Birmingham, my first non-comic show, but was hugely pleased by the positive reactions from visitors and exhibitors alike, as well as the amount of books I sold, a lot of which were destined for young readers. I also sold prints of the Sport Diver cover, raising money for PADI's Project AWARE Foundation, a global movement of divers who act to protect our oceans.

My latest project is to raise money for the British Heart Foundation's Mending Broken Hearts Appeal. Scientists have discovered that the zebrafish can repair its own heart if it gets damaged and are hoping to unlock the secrets of this super power to help millions of sufferers of heart disease worldwide. I will be selling prints via comic shows and eBay, as well as auctioning the original artwork in early 2012, with all proceeds to go to the BHF.



Marineman has been going from strength to strength and continues to attract and inspire new readers, and plans are underway for the second volume as I type!

Marineman is available to buy from all good comic book shops and book stores worldwide, as well as from online retailers.

[www.ianchurchillsmarineman.com](http://www.ianchurchillsmarineman.com)  
[www.projectaware.org](http://www.projectaware.org)  
[www.bhf.org.uk](http://www.bhf.org.uk)



# WHALE AND DOLPHIN RESCUES FROM OVERSEAS

FEATURE **STEPHEN MARSH**

Last October, Stephen Marsh and Richard Ilderton from British Divers Marine Life Rescue visited the United Arab Emirates. Here, Stephen Marsh, the BDMLR Operations Manager, reflects on what has turned out to be quite an eventful year:

It seems like only yesterday when Richard and myself landed in the UAE, laden down with huge yellow bags containing rescue pontoons and whale and dolphin models; rather a strange and weighty cargo and one that Etihad Airlines, who had kindly sponsored our flights, had been watching with interest.

We ran two courses on whale, dolphin and dugong rescue – one for EDA which took place in Abu Dhabi and one near Dubai for the Emirates Marine Environmental Group. The Emirates Natural History Group were central to organising our stay and the courses.

We had a great time, made new friends and hopefully helped to build skills and knowledge to help endeavours to rescue whales, dolphins and dugongs in the UAE. Flying back to a chilly United Kingdom we wondered what the year would bring. It was going to be hard work, with plenty of whales, dolphins and porpoises in distress, but strangely no dugongs.

On our return, we were already in the middle of the grey seal pupping season, with calls to dozens of young pups on beaches, all resplendent in their white coats. Some were merely where they should have been and waiting for their mothers to return at high tide to suckle them, but just as many were in poor condition and needed to be lifted and taken to rehabilitation centres to cure their ills and build their strength up. We respond to around 350 seal incidents a year and while each is special to us, they rarely grasp the interest of the general public.

Whales do though! Within just a few days of arriving back in the office, we received a call that around 30 long-finned pilot whales had appeared in Loch Carnan on the island of South Uist in the Scottish Outer Hebrides.



They were thought to be in danger of stranding and exhibiting stressed and defensive behaviour. One report of a small animal had

been lifted to the surface by others suggesting that either it was ill or newborn and in either case was being lifted by others to allow it to breathe. The weather was atrocious and it may be that the pod had entered the relatively sheltered Loch for sanctuary from the Atlantic storms that were raging.

Pilot whales have incredibly strong family bonds and this can often lead them into trouble. These ties mean that they will follow an ill, distressed or confused member of their pod wherever they lead them and this can often result in mass strandings.

A BDMLR team was scrambled to this remote and unforgiving location, with sets of inflatable pontoons and rescue ambulances being booked onto the ferries out to the Isles.

After three days of heightening concern among observers, the pod left the area without any casualties. Sadly, less than a week later, a pod of 33 animals was reported as having stranded on a remote island called Rutland, off the coast of Donegal, Ireland. The whales had all died and were identified as the same pod using photographs of their dorsal fins.

In May 2011, we received another report of a larger pod of pilot whales in exactly the same Loch. This time, there were an estimated 60 animals in this group and again, BDMLR medics were scrambled and as we couldn't fly the pontoon sets from the office up there, I drove for 14 hours to be with the team.



Again, the weather was appalling. At one point I was on the cliff top, my arms wrapped round a signpost, while my body was lifted horizontally by gale force winds! To see a pod in the same Loch again was of concern, but interesting as none of the previous pod would have survived to lead this group into the safe haven.

This pod however were behaving differently as they seemed to be less stressed and feeding. The state of them was of concern though, as around a quarter of them had deep lacerations

and injuries on their heads as if they had been head butting sharp rocks.

It occurred to us then that the Loch was indeed a haven as the steep sides and lack of shallow, sandy beaches would not provide a site for stranding. The whales would have been unable to come out of the sea at all. But this aspect of the site may also have caused the horrific injuries, as over the next couple of days, two pilot whale bodies washed up on the shore. It may have been that these two lactating females had died in the Loch, been deposited on the rocks and high tide and the rest of the pod had damaged themselves trying to get to them. We know that there had been military missile testing in the area prior to the whales arriving and this may have panicked them as well, possibly driving them into the loch. The injuries seen were not consistent with direct missile impact damage so this was ruled out.

Thankfully, this pod returned to open sea after a few days as well and has not been reported as being seen since. They would have been easily identified due to their injuries.

All this activity was quite strange as we had never had this species strand in such large numbers in the area. Smaller groups of two or three had come in, but these large numbers were usually only seen out at sea.

Move forward to July and a call came in again from the Scottish Coastguard. They were reporting 100 minke whales in the Kyle of Durness in the far North West of the Scottish mainland.

I knew that this was unlikely and that they were probably pilot whales again, as minke whales wouldn't be seen in those numbers. I also questioned the estimate of the size of the pod as stressed pilot whales are notoriously difficult to count in a frenzy of thrashing tails, fins and

heads. Once we had spoken to an eye witness, it became apparent that they were indeed a pod of pilot whales, numbering 60 to 80.

This was a major concern as unlike the steep-walled and deep South Uist Loch, the Kyle of Durness is a winding estuary that dries out leaving treacherous sand banks upon which whales would strand all too easily. Again, we scrambled our teams of medics and as the location demanded it, called in rescue ambulances and pontoon sets from far and wide.



It was over two hours before the nearest medics made it to the Kyle – distances are vast and roads are not the best in the Highlands. Thankfully, we had been contacted by a team of Royal Navy divers who were in the area carrying out bomb clearances underwater and were on the scene. Their assistance was central to the success of this operation, but their proximity to the event did ring alarm bells.

Garvie Island, about 2km from the head of the estuary, is the only island in Europe where the military are permitted to drop 1,000lb bombs for target practice. Every few months, divers locate and safely detonate any unexploded armaments and this exercise was being undertaken the day before and the morning of the whales' arrival. Government guidelines are that an area of 1km radius is surveyed for wildlife prior to an exercise and although many feel these guidelines are seriously flawed, the Royal Navy were working to them and no animals were sighted before the clearances commenced. It is thought that the pod, possibly feeding on its preferred diet of squid, had followed their prey close to shore. Explosions may then have frightened the pilot whales into turning into the estuary, where they encountered difficulties.



This was an incredible result as all of them would have perished had we not been there and we hope that the animals didn't head towards the Faroes where they would have been butchered. Over the following weekend, 16 bodies were post-mortemed and we are still awaiting the final results.

Elsewhere over the year we have been successfully lifting and transporting dolphins away from

bad weather to recuperate in more protected areas. Both South Uist and the Kyle of Durness have been culprits again, with beautiful Atlantic white-sided dolphins being rescued.

In other parts of Scotland, common and striped dolphins were also relocated without them restranding.

We've had some strandings where unfortunately the size of the whale has meant that there was nothing we could do. On the East coast of England we've had a couple of male sperm whales come into estuaries in a poor state. One of them was in Richard's area at Redcar.

We know that when a sperm whale enters the North Sea they are in danger – it's incredibly shallow and therefore does not carry the sort of prey that sperm whales need. When they become malnourished, they also become severely dehydrated as all of the fluids they need come from the breakdown of their food, or blubber they have built up. Without a good supply of water, the major organs cannot function properly and there is little chance for survival.

We also had a young, just weaned fin whale

in the Humber. This was again a difficult mud rescue but a successful one. Imagine our frustration when a couple of days later, the animal died, possibly having been struck by shipping close to the open sea. Larger fin whales have come in to Devon and North Uist but sadly no help could be given as these were over 60ft long and not in good condition.

We've had young humpbacks caught in nets and just this last week, a successful operation saw us combining



forces with the RNLI, lobster fishermen, the Volunteer Civil Air Patrol to free one that had lobster pot lines caught around its tailstock, dragging it beneath the waves. Specialist equipment is needed for this and a few of our team have been trained in America to undertake such dangerous rescues.

We do get some rescues though where we don't have to even touch the animal. In February of this year, we had a report of a harbour porpoise that had swum above the tidal weir in Glasgow when the lock had been open. It had been trapped upriver for a couple of days and needed to be returned to open sea, but we couldn't capture it.

After a brief period of consultation, Craig, our local coordinator, who also happens to head up the Police Wildlife Crime Unit in the area, went out in a small boat armed with steel scaffolding poles and a hammer! The flood gates were opened at high tide and Craig then lowered the poles into the water and banged them with the hammer with all his might! The porpoise took off at a pace and Craig and his team successfully herded it towards the weir, where it passed through to the tidal section without a problem.

There were many more rescues over the year but too little space here to recount them all. More reports can be seen on the British Divers Marine Life Rescue website at: [www.bdmlr.org.uk](http://www.bdmlr.org.uk).

For some of us here, it's just another day in the office!



This was probably the most difficult mass stranding rescue BDMLR have ever undertaken over a 24 hour period, working through the night. Animals had stranded on banks that were only accessible by boat and at one point, the Navy had divers in the water physically stopping half of the pod from stranding in the shallows. Having successfully herded one group out to sea, another breakaway group of 35 stranded on sandbanks, where 15 perished but our medics were able to save the rest. In all, 44 whales were returned safely to sea out of a pod that numbered just over 70.

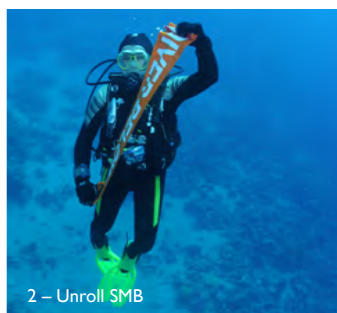


# LOCATION SMB

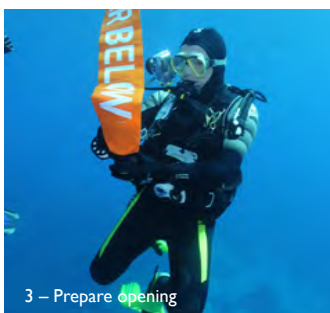
FEATURE AND PHOTOGRAPHY **GORDON SMITH**



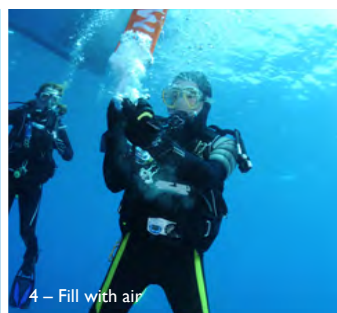
1 – Unclip SMB



2 – Unroll SMB



3 – Prepare opening



4 – Fill with air

I was at the end of my dive on the safety stop, the tide had changed during the dive and there was a fair rip running as myself and two other buddies tried to maintain our 6m depth and stay in one place together.

All of us had a hold of the rock wall at the north side of Lima Rock. As I was also hanging on to my camera housing I only had one hand free to do so, then suddenly without warning, the piece of rock I was holding on to came away from the main part of the rock and whoosh I was off at what appeared at that time to be a fairly fast current. Matt and Chris disappeared in the poor visibility as I found it impossible to fin back towards them.

I decided to complete my 3 minute safety stop and surfaced several hundred meters from Lima Rock, however I was still moving further away due to the current I found myself in, but I was not too alarmed as I was pretty sure that the tender from the Charlotte Anne would be around and pick me up.

As time passed I drifted further from the rock and I could see the Charlotte Anne maneuvering around picking up divers, apparently they were not using the tender on this dive.

By now I had been at the surface for 20 minutes and decided to use my "Dive Alert" with its ear piercing blast connected to my low pressure inflator hose. No apparent response from the boat. Knowing how noisy it can be on board, the plastic whistle is all but useless and I thought that the "Dive Alert" would be sufficient. This was the first time I was using it in "anger".

I watched the boat move around picking up some more divers as I drifted even further away. My Nikon F3 in the steel Tussey Housing was held on my chest as I floated on my back, I certainly did not want to drop that in an unknown depth of water.

Time to use my SMB, which was hanging off one of the D-rings on my BCD. I pulled it out of its pocket and inflated it using my

second stage, and held the dayglo orange tube vertical. Within several minutes I was spotted and the boat was soon heading towards me.

I was on the surface for almost an hour by the time I was picked up, that is a long time to be floating around in the sea.

So, what did I learn from this?

First of all I threw away the "Dive Alert" which besides leaking slightly and causing some air loss from my tank, was totally useless in this situation. Clearly I was way out of range, and nobody on the boat had heard it.

Second, I never dive without the SMB, and it has frequently puzzled me as to why so very few divers in the UAE use one, as the advantages are clearly obvious. As safety devices go, this should be one of the first pieces of kit a diver should have before buying anything else. Without having one on the dive I just described, I could have been half way to Iran before somebody found me!

A recent survey on Scuba Board ([www.scubaboard.com](http://www.scubaboard.com)) showed that 95% of those participating carried an SMB, a statistic that I fail to see being matched here in the UAE, it is more like 5%.

On the surface it is by far the easiest way for a boat crew to spot the diver, and in some Asian dive resorts I have used, the SMB is mandatory, with at least one per buddy pair; however as it is also easy to be separated, every diver should have one, and know how to use it.

It is also very useful when making the safety stop. I use mine when doing mid water safety stops, and have a 6m line on a finger spool for this purpose. It aids the diver to maintain a stable depth and it also alerts the boat crew the position of divers making a safety stop, in particular if they have drifted away from the main site and have not come up the anchor line.

Use of the SMB from depth is also something that should be taught and practiced, as it can



6 – Diver with SMB on surface

be easy for an inexperienced diver to ascend suddenly if they do not let it go quick enough when "shooting" it to the surface. Care must also be taken to avoid the line getting caught on the diver or the equipment, which could also potentially cause the diver to ascend. The finger spool helps to avoid this.

## EASY STEPS TO DEPLOY AN SMB UNDERWATER

1. Remove the SMB from its holder or BCD pocket and unwrap.
2. If not already connected to a line, do so now.
3. Ensure that the line will unravel freely and will not get caught on equipment.
4. Dump a small amount of air from the BCD to become temporarily negatively buoyant.
5. Prepare the SMB for filling by ensuring that the air filling point is open.
6. Using the Octopus second stage, inflate the SMB.
7. As soon as you feel the SMB pulling upwards, release the SMB.
8. Adjust your buoyancy accordingly in order to maintain the safety stop depth.
9. Whilst ascending, wind in the line using the finger spool to avoid entanglement.

On the surface it can be deployed fairly easily for boat pickup by simply unraveling it and using any second stage to inflate it.

Hopefully you may never need to use your SMB in a real emergency, however it is a very useful tool as a location device, and is more useful if carried on the dive rather than left in your dive bag.



# SEYCHELLES

MORE THAN MEETS THE EYE IN THIS UNTOUCHED PARADISE

FEATURE **SARAH MICHAELSON-YEATES** PHOTOGRAPHY **SILHOUETTE CRUISES**



With 115 granite and coral islands (the only mid-ocean granite islands in the world), the islands of Seychelles undoubtedly offer something very different and unique from the usual tropical destination. With strict environmental protections on land as well as through numerous marine parks, Seychelles is definitely one of the most popular and rare destinations. It has kept its natural beauty untouched meaning you can't help but fall in love with the scenic beauty, unspoiled nature, warm hospitality and exotic cuisine.

The Seychelles are unique, amazing, pristine islands, scattered and flourishing far away in the Indian Ocean. Great pains have been taken to keep the islands a tranquil but vibrant

destination, totally unspoiled by commercialism. With its palette of subtle colours ranging from the turquoise blue of the sparkling sea to the emerald green of the luxurious vegetation, and the clean glistening white sandy beaches, it's no surprise that some who have visited have been unable to leave, and have set up home with the Seychelloise.

Although many still have the impression that the turquoise waters and white sandy beaches are more suited to honeymooners or couples in search of a romantic break, the Seychelles is fighting back and now in its own right showing there is more to it than that. It has lush landscapes, walking trails, community activities and events, rock climbing, diving expeditions

and even rumours of mysterious legendary hidden treasure that is yet to be uncovered. The islands have it all and are breaking out from the shadows of other tropical destinations, ensuring that there is something to suit and cater to every individual holiday-maker's needs.

It has more marine parks than anywhere else in the world. If you are an ardent nature lover you won't be disappointed, because the Seychelles hosts some of the largest seabird colonies in the world and it's on these islands that you will find rare bird species of every colour. As well as the abundance of bird life, the Seychelles is home to many species of trees, fruit plants and of course the famous "coco de mer" or

BBQ aboard SY Sea Shell  
Photo by Sarah Michaelson-Yeates



CEO of National Parks – Denis Matakien  
Photo by Sarah Michaelson-Yeates



SUBIOS 'Festival of the Sea'  
Photo by Sarah Michaelson-Yeates





# DIVING DESTINATIONS

double coconut with its beautiful shapes. The islands are a paradise for walkers drawn into the forests to experience the calmness of the sights and sounds as well as trying to catch a glimpse at the world's smallest frog which can only be found in the Seychelles.

One place that is a must to visit in Seychelles is the largest island Mahe, which is also home to the beautiful Morne Seychellois National Park, Baie Ternay Marine National Park and Port Launay Marine National Park. This fertile granite island with over 65 beaches enjoys a rich diversity of flora and fauna that can be discovered through organized excursions as well as on walks and trails through lush countryside. About 30 minutes from Mahe's capital Victoria, lies the beautiful Constance Ephélia Resort which is situated on one of the most beautiful beaches on the island overlooking the national marine park of Port Launay.

The Resort enjoys a unique location set within 120 hectares of land, offering a wide range of accommodation including 184 junior suites, 40 senior suites, and a large selection of family villas (caters up to 6 people in each), hillside and spa villas each with their own private pools; as well as an impressive Presidential villa where many celebrities, presidents and politicians alike have escaped the hustle and bustle of the modern city and enjoyed relaxing in one of the most beautiful resorts Seychelles has to offer. The resort has 5 restaurants and bars hosting impressive cuisines ranging from authentic Creole and international cuisine to the freshest seafood restaurants. There is a huge array of activities including tennis and squash courts, shopping facilities, kids club, rock climbing, one of the largest spas in Mahe; La Spa de Constance, land and water sports as well as fishing and diving excursions it's hard to find a reason to feel the need to leave the large and luxurious resort.

As a diving destination, Seychelles is blessed with an almost year-round diving season on islands which lie outside of the cyclone belt. The seas are warm, offering excellent visibility and a plethora of marine life. Diving these islands is special, invigorating and yet wonderfully relaxed and as with everything in the Seychelles, there is time to enjoy the many wonders that you will undoubtedly come across.

With annual events such as SUBIOS, which has become known as the 'Festival of the Sea' and the unshakable support from the government on the protection of the wonders of the marine world, divers are becoming an excellent asset in being ambassadors for the conservation of our oceans. It is a lesson that is used as a platform to allow the community to come together and educate the younger generation about the importance of conserving our fragile marine system. Through platforms such as SUBIOS, Seychellois and visitors alike have come to understand and appreciate more about the wonders beneath

the waves, allowing the Seychelles islands to remain one of the most beautiful places on earth to explore.

The best way to discover Seychelles' mysterious coral reefs and granite formations is through Silhouette Cruises which allows you to experience the Seychelles islands in the same way they were originally discovered hundreds of years ago in the Indian Ocean.

Boasting an abundance of marine life including butterfly fish, angel fish, soldierfish, squirrelfish, octopus and a plethora of nudibranchs, Seychelles crystal clear waters offer divers an incredibly rewarding and adventurous experience that allows them to immerse themselves in the most unique adventures that cannot be found anywhere else in the world.

Diving enthusiasts have the chance to dive amongst the various underwater communities and have the opportunity to get up close and personal to the ancient granite pillars and boulders which are unique only to Seychelles. Snorkeling is another option and an easy way to see the tropical reef fish, corals, sea turtles and other colourful creatures of the Indian Ocean.

Speaking on behalf of Silhouette Cruises, Nick Watson explains, "By virtue of being at sea, many of these activities such as swimming, diving and snorkeling as well as waterskiing and kayaking, are virtually always possible throughout the entire duration of our cruises, nearly anytime a client so wishes.

Each of our vessels is considered a PADI diving centre, offering 18 dive tanks with full equipment rental available onboard, along with an experienced PADI instructor available to accompany all dives and even conduct introductory diving for first-time divers."

Through the traditional rigs of SV Sea Pearl and SV Sea Shell, guests are also able to try their hand at sailing, allowing them to experience more exciting activities.

The beauty of the Silhouette Cruises is that it doesn't only offer daily diving excursions but also offers weekly live-aboard holidays for visitors to experience the ultimate island hopping getaway. They get to discover the true diversity and beauty of the archipelago by sailing across the Indian Ocean's shimmering waters through SY Sea Star and SY Sea Bird.

Nick continues; "Blending the romance of sail with comfortable accommodation and modern amenities, our fleet represents much more than mere sailing vessels – they form the ultimate platform for adventure, discovery and relaxation on a variety of Seychelles cruises across the islands.

The very concept of our Seychelles cruises is designed to maximise this unique aspect of the destination.





On our cruises, one can discover the beauty and wonder of the many different islands of Seychelles, without the organisational burden of transfers and a multitude of excursion bookings."

For the adventurous travelers who want to explore the harder to reach islands and who want to maximize their exploration as much as possible, then the Silhouette liveaboard is the best option. Sheltered coves, good moorings and easy sailing distances as a result of the islands' close proximity to one another, allow more time for diving and snorkeling in pristine turquoise waters or exploring the exotic culture and flavour, as well as the flora and fauna of the various isles.

Also reputed for having excellent service, Silhouette liveaboards stand out for their service-oriented approach. A sizable but un-intrusive crew, which aside from the captain and engineer, includes 2 deckhands, 2 stewardesses, a dive instructor and a chef, all dedicated to ensuring guests have an extraordinary sailing holiday through the various 7 night itineraries.

Within such a dreamlike setting, there is much more to do on these paradise islands than what may first be conceived. Whatever it is that you're looking for from your holiday destination, the Seychelles will cater to you whilst spoiling you with the sights and sounds of the glorious nature around.

For more information on Ephelia Constance Resort contact:

**PORT LAUNAY, MAHÉ**

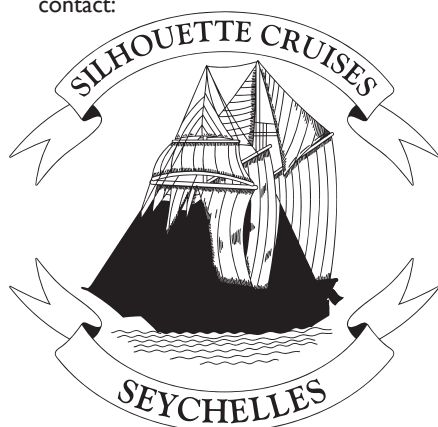
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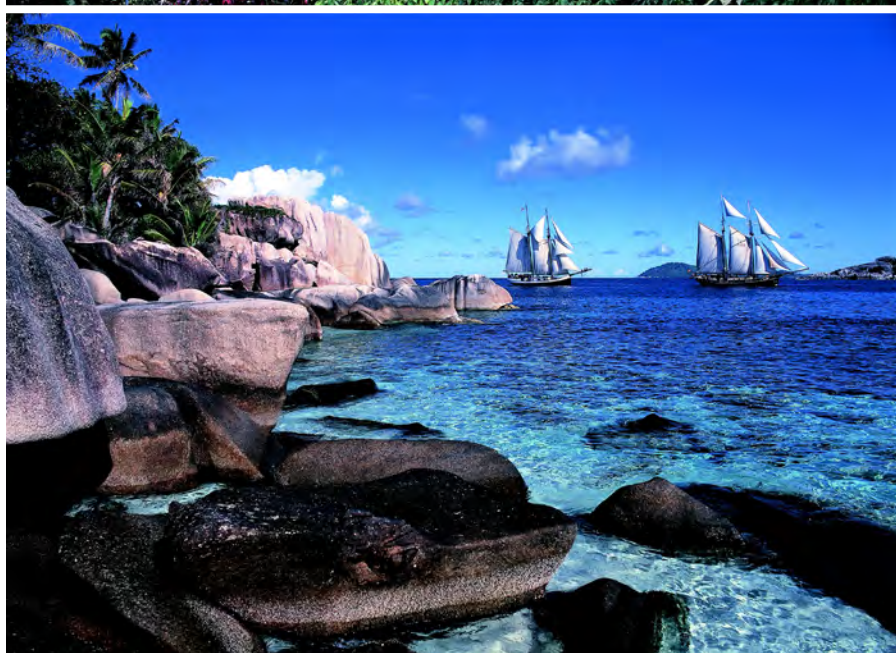
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www.seychelles-cruises.com

\* Emirates Airlines fly daily from Dubai to Seychelles.





# MALAPASCUA ISLAND, PHILIPPINES THRESHER SHARK DIVERS

FEATURE AND PHOTOGRAPHY **ALASTAIR MCGREGOR**



It was mid August when my family and I boarded the Qatar Airways flight to Doha where we would meet the rest of our group and change planes to Cebu. A total of almost 12 hours flying. Then there was the small matter of a short four hour car journey over super smooth concrete highways; well they would have been if someone had remembered to fill the joints between the slabs with something other than air. Once we got to the easterly tip of Cebu, we spent the night in a small hotel which was very welcome after the long journey. The food was hot and the beer was cold. In the morning we woke early, had a quick breakfast and were taken to the "port" and all our gear was stowed on board by the helpful porters for a mere 20 pesos per bag tip or more if you are feeling generous of course and we had a lot of gear; the joys of UW photography.

The Bangka then backed out and started heading across the small channel that separates the main island from Malapascua. The journey across is 45 minutes and you really do feel that you are sailing towards your own personal paradise. The island itself is white coral sand with jungle behind and the odd resort and dive centre poking out of the tree line. We pulled up right in front of the dive centre, the plank was lowered so we disembarked and were met by the Thresher Shark Diver crew. We pulled our dive gear out and stowed it in neat boxes that will be ours for the duration of our stay. These are loaded on whichever boat you sign on for so all we had to carry to the boat was our cameras. Superb! We were then given our briefing on how and where to sign up for

dives and some other paperwork to sign. All in all, very efficient and easy to follow, thanks to Dino and crew for making it easy.

It was then time to check into our rooms which we booked through TSD. With this you get a dive package, choice of resort and breakfast for a reasonable rate. We chose to stay in the Tepanee Resort which was very comfortable with very friendly staff but was a little far away from the dive shop. Not too far really, but carrying camera's back and forth over ten days with three dives a day it gets a little heavy, although I probably needed the exercise. TSD are converting one of the kit rooms into a secure camera room complete with charging facilities so that will be something to look forward to next time we visit.

### THE DIVES

We had ten diving days during our stay with only one dive on our first day as we had spent the morning getting across the channel. No night crossing is allowed as getting on the boat is a little tricky due to it being a rock pier. Diving is done from a large Bangka. In order to get in the water, you need to do a giant stride from the front decking. It is then easy for one of the guides or boatmen to hand down your camera. The boats were never crowded and tea and coffee as well as water were available on board. We returned to the dive centre in between dives so that you can have lunch and do your surface interval on land which was nice and helped us to relax. The temperature was 26-28°C underwater which was pleasant in a 3mm long wet suit with a thermal layer underneath.

**DAY 1:** We started with an easy muck dive on Bantigi. This dive site at first glance is a little bit sparse but once you start exploring the little coral mounds, sea grass and rubble, you start to notice all the small critters that are hiding, either waiting in ambush or jumping from coral to coral dodging a potential ambush, or like some, brightly coloured and just daring a predator to try and take a bite. We found on our first dive, demon stingers, scorpion fish, two types of frog fish, imperator shrimp on a sea cucumber, robust ghost pipefish, sea moths, Zebra crabs on urchins, Ornate pipefish, dwarf pipefish, peacock mantis, lionfish, helmet gunnards, and a variety of lionfish and Nudibranchs of course. The variety on the single site was amazing and that was our first day.

**DAY 2:** Was an early start as we were going to Monad shoal in the hope of finding Mantas and the animal which has made this island famous, the Thresher Shark. We were at the dive centre at 0530 in the morning as the best time to see the sharks is early in the morning and when there aren't so many boats in the water. In the interests of not disturbing the animals there are rules that have to be followed: each of the cleaning stations is marked and the ropes should not be crossed so that no one accidentally disturbs or damages the cleaning stations, oh and breath slowly and quietly. The other rule that was a little disappointing to me was that there is no flash photography on the site. However I understand the reasoning, these are deep water sharks and if they get blasted by a strobe, I am sure they are not going to hang around for long. The dive is







# DIVING DESTINATIONS

22.5m deep so Nitrox was the order of the day – in fact we dived Nitrox on almost all of the dives, well worth the extra bottom time we gained. Once we were at the dive site we split into smaller dive groups with our guides (Tata and Mafe). There were six of us diving so we had two guides. We descended the anchor line and found ourselves hovering over a rather desolate site. The Philippines has long suffered from dynamite fishing and this area is no exception, but with the hard work of the dive centres on the island you can see the coral growing back and the cleaning stations healing. In fact a small fee is paid to dive the Monad shoal which goes towards protecting the area from the dynamite fishermen. We swam a little way to the first cleaning station against a light current and sat behind the rope patiently waiting trying to breathe as quietly as possible, looking and hoping to see our first thresher shark. We went to each cleaning station in turn and hovered behind the rope all the time looking at our deco time and our gauges slowly counting down. On the last cleaning station a carefully planned signal squeal from my wife alerted us to the presence of the first thresher coming into be cleaned, the shark was magnificent, roughly four metres long with its long graceful tail trailing behind it. This one circled around the cleaning station and then swam off into the blue, another came in to be cleaned and looked even larger than the first. This animal circled the cleaning station several times before disappearing as quietly as it came. As we were about to leave and ascend to our safety stop, a large pelagic manta ray came sweeping into view, it did a few loops and then disappeared into the depths – I think I almost forgot to press the shutter for the whole scene. It was truly an amazing experience. You could see the grins behind the mouthpieces as we did our safety stop and got back on the Bangka (Amy). It truly rates as one of my most amazing dives. And the best part it was not even nine o'clock yet! The next dive was on Deep Rock, this site is a sloping reef dive that goes down to white sand which is good for photographers as I find that where the coral reef meets the sand you often find a lot of opportunities to get eye level with animals without laying a fin on anything fragile. This area was a haven for nudibranchs, lionfish, anemone fish and their colorful hosts, frogfish, giant frogfish, hawkfish, and mantis shrimps. Our third dive on this day was a night dive on the Light house site where we were promised mandarin fish mating. Now we have all been to places where it was guaranteed and here it is assuredly true every night. We found our friendly loving mandarins hiding in the hard coral, each male with his harem of females and sat and waited for the show to begin! There were enough mating groups that even with four photographers on the dive we could wait and photograph without blinding each other. We were not so successful in our first attempts and we soon figured out that our best bet was to keep the lights off until in the lowlight we saw them rise to spawn and then try to photograph them, but as soon as the light came in they disappeared making it hard to lock sharp focus. However, we soon learnt a few tricks to get closer to the shots and while I didn't get the shot I was looking for of these colourful fish, it does give me another reason to go back! Also on this site, we had seahorses, cuttlefish, nudibranchs, mimic cuttlefish and bobtail squid.

**DAY 4:** The next morning we weren't up as early and we made our way to Bugtong Bato. This site is a pinnacle going down to 30m. We spent the majority of the dive at 23m. The site is covered in glorious soft coral and nudibranchs are everywhere and I believe that we found some 15 or 20 different species in a single dive here. I also found what I thought was a juvenile pipefish but I was cursed with having a fisheye lens on but still I saw it (barely). We dived Bantigi again on this day and it really proved to be very productive for macro and super macro photography – squat lobster on fire urchins, xeno crab, nudibranchs. By day four we had decided which sites to dive and as we were mostly photographers, we wanted to stick to the same sites so that we could learn where the animals lived and how to find them again and practice new ideas. On this site I experimented with CFWA, WA, macro, and super macro and of course my beloved snoots.

**DAY 5:** This was our first day trip. There are several islands that are a bit more remote and require a day trip. The first is Gato Island and the second which became our favourite was Calanggaman Island. For Gato I chose my Fisheye lens again but in reality I should have added the tele-converter and gone for CFWA as there were some particles in the water that made WA quite difficult. However the soft corals on this site were amazing – everywhere you looked there was red, purple and yellow soft coral as well as large anemones. For macro there were large amounts of nudibranchs of different species and on the second dive we went through the cave and found sleeping white-tip sharks and enough different small animals to keep a macro photographer busy.

**DAY 6:** The next morning we found ourselves relaxing on board Amy heading out to Calanggaman Island. The weather was glorious, the sun was shining, we could see rain clouds in the distance but too far to worry us. We arrived at the island around 11am and kitted up and jumped into the water and hovered at about 12m before disappearing over the edge and plunging into the deep blue. We dropped to 25m and saw the most amazing wall covered in sponges and hard and soft corals that has to be seen to be believed. There were gorgonian fans (no pygmy sea horses) and nudibranchs, crustaceans, scorpion fish, a macro photographers dream! We were definitely coming back.

**DAY 7:** Chocolate Island is a shallow dive and has plenty of macro photo opportunities. We found nudibranchs amongst the coral, some that I had never seen before and we had to look them up including some large heavily camouflaged animals as well as large purple ones that were hiding in the open. We also found banded pipefish, juvenile batfish, decorator crabs amongst many others. In the afternoon, we returned to Bantigi for an afternoon of critter hunting – always a joy.

**DAY 8:** We returned to Calanggaman and dived another part of the site and again it was fantastic. For the second trip to the island I opted for a fisheye lens with a 1.4 and 2.0 tele-converter and if I go back I will shoot it the same way again as it gave me those images that are special to me and different from the standard macro shot. When we went in

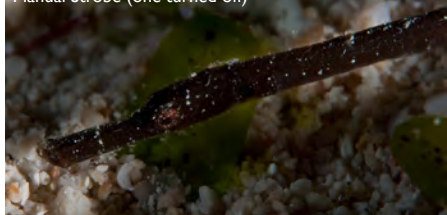
## BANTIGI

Devil Stinger – Nikon D90 60mm f1.6, 1/200, 2 x Inon Z240 Manual Strobes (one turned off)



## BANTIGI

Dwarf Pipefish | 60mm +2.2 Diopter f1.6 1/200 z240 Manual Strobe (one turned off)



## LIGHT HOUSE

Tiger Tail Seahorse | 105mm f2.2, 1/125 z 240 Manual Strobes

## BANTIGI

Sail Fin Blenny | 105mm F1.4, 1/125 Manual Strobes





it was sunny but raining and when we came out although a little while later the sun came out to escort us back to the island. We were truly lucky with the weather as in other parts of the Philippines there were heavy rains and flooding. Although in all my trips to the Philippines I have never missed a diving day due to weather – there is always a site somewhere that you can dive.

On the last two days of our diving, we repeated some of the local sites – mainly Bugtong Batu and the second time I dived this macro site, I was delighted with the critters that we found. We revisited Bantigi and the Lighthouse dive and we never got bored as there was always something to find, see and photograph.

There are many other sites in the area and some wrecks as well, but we wanted to concentrate on our photography and listened to our guides and the advice handed out by the DMs and Instructors and I really feel that we found what we were looking for. It was a truly relaxing diving vacation and it was made by the staff at the centre whose concern was for our experience and diving pleasure.

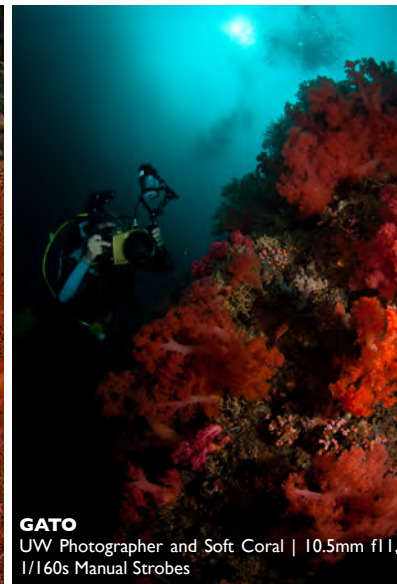
The main thing missing from the dives were the large schools of fish and this is due to the local practice of indiscriminate dynamite fishing and I believe that this will grow back as it has in other parts of the Philippines. Puerto Galera springs to mind where it has been protected since the seventies and the fish population allowed to recover and I believe and hope that the more people that visit and the more money that is made from tourists and diving, the dynamite fishing will slowly stop or be reduced. However, as a macro destination and for the large pelagics at Monad Shoal and Kimud shoal, it really is a fantastic destination.

## BANTIGI

Imperator Shrimp on Sea Cucumber | 105mm f20, 1/200 Manual Flash



**CALANGGAMAN**  
Sea Fan | 10.5mm + 1.4x Teleconverter



**GATO**  
UW Photographer and Soft Coral | 10.5mm f11, 1/160s Manual Strobes



**GATO**  
Balled Anemone | 10.5mm f14, 1/200s Manual Flash



**BUGTONG BATU**  
Squat Lobster and Fire Urchin | 105mm f22, 1/200s Manual Strobes



# AQABA THE RED SEA IN JORDAN

FEATURE AND PHOTOGRAPHY **PHILIPPE LECOMTE**



Aqaba is a little city in Jordan tucked away between Israel and Saudi Arabia. It is reachable within a 3 hour flight from Abu Dhabi to Amman with either Etihad or Royal Jordanian. It takes another 320kms (3 hours) to reach Aqaba by road from Amman's airport. It is a fantastic destination for the adventurous diving community.

Jordan is a very beautiful country and is just as fantastic a destination for the history lovers for its well known ruins, coliseum, castle and monastery. Petra, Jerash, Al Karak, Wadi Rum, Amman and the Dead Sea are all the top names of the places to be seen once in a lifetime.

Jordanian people are incredibly friendly and welcoming. They like to help and guide tourists without being too trying. It is also easy enough to get around in Jordan, that you could rent a car. Think about taking a GPS though as signs are all in Arabic, and for those that don't read it, it could lose you time.

The view in Aqaba on the Sinai (Egypt), is wonderful and highly recommended. Do not forget to check your flight times though, as when you leave Aqaba to see some of the historical sites, you have to pass some mountains to get to them, so beware.

Aqaba is starting to become a very popular destination and is attracting more tourists to the area. They are constructing some beautiful hotels and marinas and you will easily find places to stay.

The Red Sea coast of Jordan is only a few kilometres long, about 20 to 25kms and has plenty to offer in their underwater world. You can choose to dive with Sinai Divers or with the Barracuda Dive Center.

I had decided to go with Sinai Divers as I knew them from Sharm El Sheikh. In front of the dive club they have one of the best dive sites in Jordan called, Kiwi Reef. It's a good spot for both divers and snorkelers.

Jordanian dive sites seem small compared to the length of their coast, but they have different kinds of dives. The big wreck, Cedar Pride or the Tank is a must to dive. The wall going down to 40+ metres (Power Station) and the coral reefs, the sandy slopes with algae are some other beautiful biotopes.

Other dive sites to add are Japanese Garden, First Bay, Oliver's Canyon, Aquarium House Reef and more. There are around 16 dive sites in those 20 kilometres of coast so there is plenty to see on a 5 day visit.

If you wanted to, you could do just a day trip and do 3 dives. Otherwise, they have 2 dives a day by speed boat or from the shore.

People looking for big fish could get a disappointment. Due to the location of Aqaba, it falls to a dead end. Very few of the big fish are seen in the area. It has happened that the odd turtle or whale shark have made an appearance, but there is no guarantee of such a visit. But saying that, you have to open up your eyes and look around carefully in order to discover all the other amazing creatures.

A macro-photographer will find some nice subjects. In this area, I've seen some beautiful animals that are very difficult to spot in other parts of the world.

The biotope is perfect, especially for the Scorpaenidae family. Lionfish, Stonefish, Red Sea Walkman, Bearded Devil and Flathead Scorpionfish are often seen in the sandy slopes and coral reefs.

Crocodile Fish, Seahorses, Frogfish, Shrimpfish, Seamoths, Garden Eels, Octopus, Nudibranchs and some beautiful schools of Anthias are only but a few more of what you get to see there. You'll have to visit it for yourselves to see just how rewarding the diving really is.

Diving in this area is not difficult but take note of the weather and especially the wind. It can get very strong and can cancel some dives.

Otherwise, you will definitely enjoy going over there. Diving in the Red Sea in my experience has always been so amazing and relaxing. We are so lucky to have this wonder at our door step.

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













# MALDIVES

FEATURE **MAFAZ HALEEM & SHAFRAZ NAEEM** PHOTOGRAPHY **SHAFRAZ NAEEM/SQUID MEDIA**



The Chinese were among the earliest travellers to the Maldives, describing it as the "Three Thousand Weak Waters" — because of the calm waters inside the atolls. To the numerous well-to-do tourists who make the long haul, this island nation of 26 atolls remains the epitome of luxury, with stunning white sand beaches and equally impressive resorts. Divers know it simply as one of the finest spots on the planet to dive.

Flying over the Maldives, the first thing you'll notice is the necklace shaped atolls emerging from the bluest waters imaginable. As you descend towards the airport, you'll begin to make out the individual islands and beaches, before finally touching down on a runway that seems to be surrounded on all sides by water!

Most of the resorts are located in Ari Atoll and Kaafu Atoll, and depending on where you're staying, it will take a boat or seaplane ride to get there. One thing is universal, however; the warm welcome you'll receive when you arrive and the exemplary hospitality on offer throughout your stay. After the long journey to get here, you'll almost certainly want to spend what's left of your first day chilling out and lapping up the luxury.

With unfailing sunshine and cobalt blue waters at a temperature that's like getting in the bath, it's no surprise that snorkeling and diving are huge in the Maldives. The dive centers at each resort cater to every level, from absolute beginners to advanced divers who can tackle deeper water and difficult currents.

A dive center will typically plan up to 3 dives per day to various locations near the resort,







using local boats called dhonis to navigate between sites. As a diver, an unbeatable option is joining a liveaboard, as you'll have the opportunity to see diverse dive sites at various atolls and pack in all the top locations in one trip. Maldivian liveaboards don't skimp on luxury either; and food and service onboard will be top notch. Their popularity means that many vessels are fully booked several months in advance, so make sure you plan well ahead.

Each dive site has particular characteristics and unique marine life, but what they all have in common is fabulous multi-coloured corals and a mind-blowing abundance of fish species. You'll be greeted by playful sea turtles, moray eels and sting rays. Sharks such as whitetips and blacktips are a common sight, although they tend to swim around in deeper waters. Manta rays and whale sharks are also seen throughout the year.

With so many dive sites to choose from, you'll have to be selective. Firm favourites include Maaya Thila in Ari Atoll for its easier currents and endless parade of exciting creatures including turtles and the sharks, especially during a night dive. Rasdhoo for its hammerheads, grey reef sharks, whitetips and rays; Nassimo Thila and HP Reef in North Male Atoll, for their amazing reef formations and sheer density of marine life and colourful soft corals.

Take a break from diving to visit a local island and see how ordinary Maldivians live, try the tasty local cuisine, and indulge in some Bodu Beru song and dance, with its distinctly African vibes.

Emirates have daily flights to the Maldives.

## **SOME OF THE TOP DIVE SITES OF THE MALDIVES**

### **HP REEF/RAINBOW REEF – NORTH MALE ATOLL**

HP Reef or Rainbow Reef is a Protected Marine Area. The site is located near the island of Himmafushi and is in the channel called 'Himmafushi Kandu'. Soft corals grow in abundance on the reef outcrops and under the overhangs due to the strong currents coming through the channel. HP Reef has an unusual reef formation in terms of reef outcrops, caves and crevices. Schools of Trevally, Snappers and Dog-toothed Tuna and

Eagle Rays can be seen regularly.

### **KUDA RAH THILA – SOUTH ARI ATOLL**

This is one of the best dive sites in South Ari Atoll. This is also a Protected Marine Area. The coral life is amazing at this site. Seafans can be seen on the northern side of the thila. There is a swim through between the main reef and the separate pinnacle a few feet away. You can see White-tip Reef Sharks, Barracudas, Trevallys, Snappers and Dog-toothed Tunas all throughout the dive depending on the currents. Sometimes the currents are really strong here.

### **KANDOOMA THILA – SOUTH MALE ATOLL**

This thila is in the middle of Biyaadhoo Kandu between the islands of Cocoa Resort and Kandooma Resort. The top of the reef is full of hard corals. The sides of the thila are covered with different coloured soft corals. The currents are strong here and there is a huge variety of pelagic fish to see. Grey Reef Sharks can be seen regularly depending on the currents.

### **HANIFARU – BAA ATOLL**

This is the best place to see Whale Sharks and Mantas together! It's a small bay on the reef of the island Hanifaru. The plankton bloom inside the bay from July till November attracts the gentle giants for feeding. Sometimes there are six to eight Whale Sharks together with hundreds of Manta Rays.

### **RAKEEDHOO KANDU – VAAVU ATOLL**

Rakeedhoo Kandu is the channel on the east side of Rakeedhoo Island and one of the most famous channel dives in this atoll. This dive site has a lot of caves, good coral life and massive seafans. Hammerhead Sharks can be seen when you dive early in the morning and Grey Reef Sharks are seen regularly. Napoleon Wrasse, Turtles and schools of Trevally and other pelagics can be seen here.

### **FOTTEYO – VAAVU ATOLL**

Fotteyo is regarded as one of the best dive sites of the Maldives by a lot of divers. There are large caves with swim throughs. The caves are covered



with thick, long soft corals of different colours. This dive site is a favourite for photographers because of the colourful soft corals. You will see schools of Barracudas, Tuna, Eagle Rays, Trevallys and Grey Reef Sharks. Sting Rays and White-tip Reef Sharks can be seen on the sandy area of the channel. Hammerheads have been seen on early morning dives.

## MAALHOS THILA – NORTH ARI ATOLL

Maalhos Thila also known as Blue Caves, is in the channel on the northern side of the island of Maalhos. The caves are covered in various colours of soft corals. The top of the reef has a healthy growth of hard corals. Sting Rays can be seen swimming close by the reef and sometimes resting inside the caves. Green Turtles and Hawksbill Turtles are seen regularly.

## NASSIMO THILA – NORTH MALE ATOLL

This thila is considered to be one of the best thilas of North Male Atoll. This thila has a number of pinnacles strewn randomly a few feet away from the main reef. The full strength of the currents hit these pinnacles and soft corals are plentiful. Midnight Snappers, Dog-toothed Tunas, Barracudas and White-tip Reef Sharks are seen here. The ceilings of the long overhangs and caves on the main reef are covered with blue and yellow soft corals. Inside the other overhangs are seafans. The top of the reef is covered with hard corals. Schools of Snappers, Oriental Sweetlips, and Eagle Rays can be seen.

## MAAYA THILA – NORTH ARI ATOLL

This dive site can be dived in one dive depending on the currents. The diversity of marine life here is amazing. You can see dozens of White-tip Sharks, Snappers, Sting Rays, Eagle Rays, Grey Reef Sharks and many other pelagics. This reef has a lot of caves and overhangs. And the reef has scenic soft corals and gorgonians. There are also some coral pinnacles away from the main reef. On the reef top you can see schools of fusiliers and Hawksbill Turtles. A night dive here is a thrilling one. You can see hunting White-tip Reef Sharks, Giant Moray Eels, Sting Rays and Giant Barracudas up close. Maaya Thila is a Protected Marine Area.

## EMBUDHOO EXPRESS – SOUTH MALE ATOLL

Embudhoo Express lies in the Embudhoo Channel and is a Marine Protected Area. This site is best dived with an ingoing current. The currents here are considered to be really strong and is known to be one of the best drift dives. The southern corner of the channel is where the Grey Reef Sharks are seen and there are many small caves and a few long overhangs. Schools of Eagle Rays, Sting Rays, Dog-tooth Tuna, Trevallys and Barracudas are seen here as well. In the middle of the channel is a small thila with impressive show of hard and soft corals, which covers the reef.

For more information about the Maldives, visit [www.maldives.net.mv](http://www.maldives.net.mv)









# REEFS & WRECKS LIVABOARD

FEATURE **ALAA ALQAQ** PHOTOGRAPHY **MOMEN KHAITI**

It had always been on our diving wish list, until my buddy and I finally decided that it was time to finally go for it. We wanted to go on our first liveaboard experience and we had a number of options to choose from. We finally decided to go for the Reefs & Wrecks Liveaboard, aboard the M/Y Emperor Superior, operated by Emperor Divers. Cruising the clear waters of the Red Sea, the luxurious yacht launched from Hurghada and went on for a week, passing by Sharm El Sheikh, and back to where it sailed from.

Whether you travel by yourself, with a companion or a group, liveaboards can be ideal. They offer a wonderful opportunity for meeting new friends. If you are a single traveler, then you really don't need to worry about who will be your dive buddy, as there'll be a boat load of them on board. In addition, members of the dive staff gladly act as buddies for solo travelers.

When not diving or lounging on the sun deck, you'll likely relax in the comfort of the main salon. Most liveaboards main salons feature entertainment centers with a TV, video, DVD players and stereo systems.

Many reasons played an important role in us choosing this trip.

- Hurghada is a close dive destination, only a 4 hours flight from Dubai with a connection flight from Cairo.
- The itinerary has the best of both worlds, where you visit famous wrecks in the northern Red Sea along with some stunning reef diving starting from Hurghada port to the straits of Gubal covering an area of 500km<sup>2</sup>.
- We had the chance to do three or four dives a day. Night diving is also offered. We could dive as much or as little as we liked.
- As underwater photographers, a liveaboard dive trip is the perfect vacation, we can dive as much as we want, shoot lots of photos, and leave our cares high and dry back on land.
- The dive trip is light on the pocket, we had a full week of diving + an air ticket for only Dhs7,000 per person.

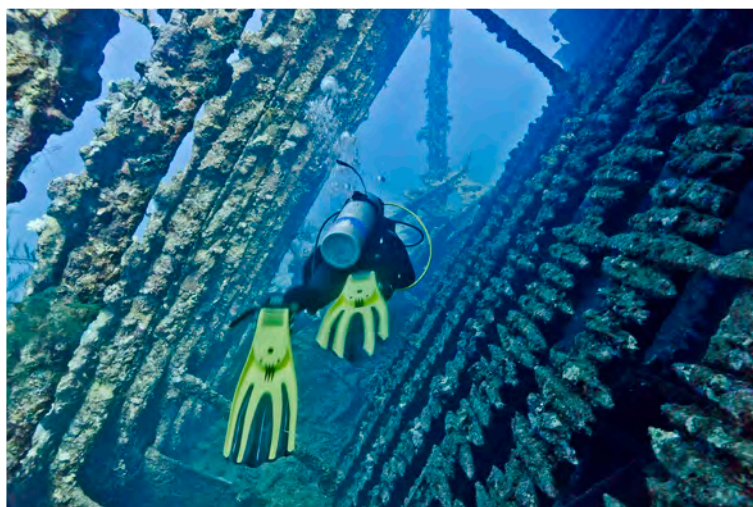
Upon arrival we were picked up by the dive

center and headed towards the port to start our first liveaboard experience packed with excitement and joy!

Measuring 36m, Emperor Superior offers ten twin-berth cabins comfortably accommodating 22 people. All cabins have air-conditioning and ensuite bathrooms. The spacious dining and salon areas offer air-conditioning, DVD/TV and stereo. There are also two sun decks, complete with jacuzzi/hot tub, and a dive deck with platform.

## WRECK DIVING THE CARNATIC (RIBCAGE)

The Carnatic was launched in London in 1862 and she is one of the older wrecks in the Red Sea and after her sinking in September 1869 she lay alone on the reef of Abu Nuhas for over 100 years before being joined by several other wrecks in the 1970's and 1980's. She is made of iron construction and was a passenger sail and steam ship, 90m in length with a beam of 12m.



She had carried cargo of wine, cotton and gold. The Carnatic struck the reef of Abu Nuhas just after midnight where she did not sink immediately but became stuck on the shallow reef top. After some 36 hours on the reef the Carnatic finally gave up her hopeless battle and broke in half. The lives of 26 crew and 5 passengers were lost.

Today, the Carnatic is a fantastic dive site. The wreck lies in around 22m of water at the base of the reef, tipped over onto her port side. She lies parallel to the reef wall with her starboard side facing towards the top of the reef. The current here can be strong and normally runs from the bow to stern, so it's a good idea to start your dive at the stern and head forward into the current, before drifting back. The wooden decking is gone making it possible to swim between her decking beams which now

look like a giant ribcage. Indeed everything about a dive on the Carnatic is picturesque since the vessel was tilted towards the surface allowing the light to penetrate the holes and windows in addition to the colorful soft corals which were covering the massive body and were creating a spectacular scene!

## GHIANNIS D

The Giannis D was built in 1969 in Japan and was originally called the Shoyo Maru. In 1975 she was sold and renamed the Markos. In 1980 the ship was then sold again to a Greek company who gave her the name the Giannis D.

The Giannis D set sail from Croatia in April 1983 with a cargo of softwood destined for the Saudi Arabian Port of Jeddah. On the way, the Giannis D had hit the northwest corner of Sha'ab Abu Nuhas at full speed.

The Giannis D is now found in three separate sections – bow, amidship and stern, lying more or less parallel to the reef.

There is easy access to the engine room which offers a very exciting penetration for those who prefer to venture deep inside. The bow rests perfectly on its port side with the decks facing away from the reef. The front main mast is found stretching out directly above and parallel to the sand – seemingly defying all the known laws of gravity! Many hard and soft corals have begun to colonize this part of the wreck and numerous reef fish have crossed over from the adjacent reef to set up home. A very large

Napoleon is often encountered here.

On they way back to the yacht we had an amazing encounter with bottlenose dolphins! The minute we saw them, we jumped from the zodiac into the water and swam with them for around 10 minutes! They were very curious and playful!

## CHRISOULA K

The Chrisoula K was a Greek registered freighter and on its final journey, its cargo consisted of Italian floor tiles heading for Jeddah. It sank August 31<sup>st</sup>, 1981.

The Chrisoula K now sits in a large open, sandy space. The bow used to rise out of the water, but wave action has now reduced it to a few meters below the surface. The main body of the wreck is generally upright with the



# DIVING DESTINATIONS

cargo of tiles still in place. The stern leans well over to the starboard and is slowly separating altogether. Deep inside the stern, the engine room offers some serious penetration diving for the experienced wreck diver, although there are numerous obstructions so be careful. There is also the possibility of some much more straightforward penetration with plenty of easy swim-throughs and access to areas worthy of exploration without the danger of becoming lost inside. On the seabed, the large propeller and rudder are still virtually undamaged at a maximum depth for this dive of 26m. The Chrisoula K is now covered in an assortment of hard corals and is home to a variety of reef fish.

## SS THISTLEGORM (UW MUSEUM)

In the gulf of Suez, the Thistlegorm lies on a sandy bottom at 30 meters. This armed cargo (126.5m long) is full of military equipment from the British troops based in Africa. She was bombed by the German planes on the 6<sup>th</sup> of October 1941 when she was near the reef of Sha'ab Ali, waiting for orders to move up the canal. The ammunition chamber exploded and the Thistlegorm sunk rapidly taking down with her 9 of the 49 crew members. The wreck was then forgotten until the early 1950's when Jacques Cousteau and the Calypso discovered and identified her.

On the front deck, torpedoes and two railway cars can be seen as well as a train engine which lies on the sand next to the ship. At the stern you can see two anti-aircraft guns pointing toward the deep of the sea.

The cargo space is full of military material in an amazing state of preservation. Jeeps, tanks, trucks and bikes.

Today this massive ship, is the most famous wreck of the Red Sea. Diving on a wreck of this size is always a very exciting experience. This visit in the past will be without a doubt an unforgettable one. It is necessary to plan at least two dives on this wreck to be able to see everything. The water current from the north is quite strong and visibility is not very good.

## REEF DIVING SHARK & JOLANDA

This is one of the most famous of the northern Red Sea dive sites and as a result can be very busy. I dove this site 8 times in the past 3 years! The best time to dive is at first light – somewhere around 6.30am. It is well worth the early start. The dive site has two pinnacles which rise up from a vertical wall with a drop off down to 300m – the one to the east is known as Shark Reef and the one to the west is known as Jolanda (named after the Cyprian ship which hit the reef in 1980).

If currents allow, there are some beautiful hard coral formations between the two. I have often seen a single turtle at this point in the dive and as the plateau rises to around 15m



you will see some toilets which make a good photo opportunity and is a constant source of amusement.

As you come around to the Jolanda Reef there are vast numbers of toilets and sinks which made up the majority of the cargo of the container ship Jolanda. A common misconception is that the cargo container wreckage is actually the wreck of the Jolanda – it is not. The wreck itself, having initially lodged on the edge of the reef wall at around 25m, subsequently slipped over the edge, stern first, and down into the depths. The wreck itself now rests on a 40m wide ledge, where it crumpled after its stern impacted with the ledge – the bow at 140m and the stern at just over 200m.

The final part of the dive can either be spent behind the north side of Jolanda or over the cargo wreckage. The normal exiting procedure is to ascend to your safety stop depth and drift away from Jolanda Reef. If the current is too strong, perform your safety stops behind the reef where you will get protection from the current before drifting off for pick up, otherwise you may drift far away from the reef!

## SIYUL ISLAND

Siyul is the name of the Island the reef surrounds and Kebira in Arabic translates to "Large". There are two islands here both called Siyul and the second smaller island is known as Small Siyul – Siyul Saghira.

These dive sites are of the lesser dived sites in the Red Sea, visited only by safari boats.

The zodiac can drop you quite far around the east side of the reef towards the north wall. It is much deeper here so make sure you locate the reef as a reference for descent before you leave the surface and then head with the reef on your right side back towards your boat mooring. The further round the reef you

get dropped, the deeper the bottom slopes away. When you reach the southeast tip there is a pinnacle at 22m. This is literally teeming with small fish life and soft coral and great for photographs. There are table corals and coral fans and a couple of pinnacles which have thousands of glassfish literally covering them, and small shoals of butterflyfish and Red Sea bannerfish gently swim by. If you have time it is worth spending the latter part of your dive here and then ascending up to 10 meters and following the main reef (right shoulder) back to your boat on the south side. If you are lucky enough to have some current here, it should run north to south and make it a relaxing soft drift dive.

## CARELESS REEF

This isolated reef, lies between Shaab Umm Qamar and Giftun Island. The reef itself centers on two peaks or pinnacles. The valley between these pinnacles is about 16m deep, and offers a wide range of dive possibilities for those not interested in deep diving. A few meters east, a steep wall drops well beyond 40m. Reef composition is diverse, with most coral species, both hard and soft, making a vibrant and interesting coral habitat. As well as the famous eels, there are innumerable species of reef fish. This site marks my first experience of spotting a large octopus camouflaged with colorful coral!

The reef's isolation combined with the deep water, makes it ideal for Jacks, tuna and barracuda.

In conclusion, the trip was by far one of the most exciting diving trips we have ever been on. The great weather, the spectacular pristine waters of the Red Sea, combined with meeting a nice bunch of fellow divers from all over the world and great service, all led to having the perfect trip all around.

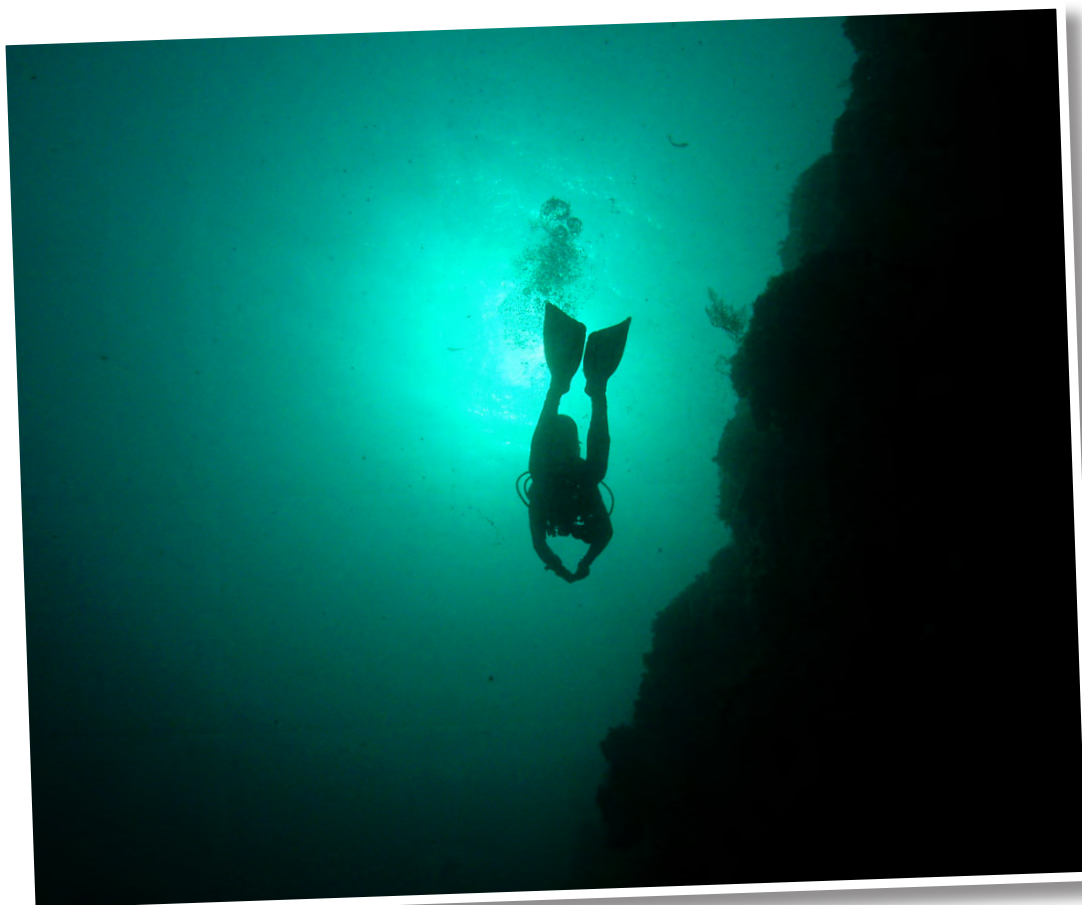
We left there with a strong intention of going back again at the earliest opportunity, perhaps even with the same group of divers and the same crew, and aboard the same beautiful M/Y Emperor Superior, though with a possibly different route. Until then, sweet memories, photos and videos will keep reminding us the great moments we had during our trip.





# HOW TO POP EARS UNDERWATER

FEATURE **BARBARA KARIN VELA, MD** PHOTOGRAPHY **JENNIFER SHARP/MARINE PHOTOBANK**



Ear issues are the most common problems experienced in diving, at least in my practice. One can experience many symptoms coming from the ears, and these problems can start on the descent, during the bottom time, on the ascent or hours after diving. The problems and symptoms may seem endless, sometimes even overlapping and a patient can have more than one diagnosis from a single diving exposure. Who ever tried to put his/her head under water, knows there is a pressure feeling in the ears, which can be very uncomfortable. Those who tried to dive with that pressure know that the pain can become very severe. While free diving, snorkeling or simply jumping into the water you can feel such discomfort. Many are discouraged from diving, as they believe there is a problem with their ears. I have family members and close friends who, at one point in time, were in this, "my ear hurts and I should not dive" group. I tend to spend a lot of time during my consultation hours to explain the correct ear equalization techniques, and while a prospective diver tries to blow in the ear, I check whether the attempt is successful, which technique is appropriate and the diver understands how the "pop" should feel.

Let's look into the anatomy of the ear first. From the outside we have the external ear, which is composed of the ear lobe and the ear canal. Then comes the middle ear, a cubicle

like space, separated by the eardrum from the external ear canal, connected to the throat by the Eustachian tube, and separated by two membrane windows from the inner ear. The middle ear contains three small bones connected into a chain that goes from the eardrum to one of the membranous windows. This chain transfers sound to the inner ear and the hearing center. The middle ear cubicle contains gas, which is slowly being absorbed by the lining of that space. While we are awake, the Eustachian tube is repeatedly being opened once a minute to release the negative pressure which accumulates in the middle ear due to the gas absorption, and while we sleep the same process happens once every five minutes. The Eustachian tube opens unconsciously, by the act of swallowing or yawning and in everyday life we are not aware of that process. Once we become aware of it, it means there is a problem somewhere along the way and it is usually in the Eustachian tube. When it comes to diving, we use the voluntary equalization of ears. First of all, it is quite difficult to swallow with a regulator in the mouth, also a bit difficult to yawn, so one has to master the technique of ear equalization while keeping the mouth shut. Those who are familiar with the laws of physics will remember that the volume of gas in a closed space is inversely proportional to the pressure as long as the temperature and the gas molecules remain the same. The

physicist called Robert Boyle came up with this gas law in 1662 and it can be applied to any closed gas space in the body. With the middle ear, that law is easily felt as pain, bleeding, rupture of the eardrum, feeling of fullness, or hearing loss. Plus, with the middle ear one doesn't have ideal conditions, since the gas molecules are being reduced with time because the lining of the middle ear absorbs oxygen. The Eustachian tube, which is a virtual tube, being in the collapsed state most of the time, opens usually by moving throat and neck muscles. Once, a certain pressure is exceeded, it locks itself and doesn't allow any passage of the gas through the space between the throat and the middle ear. This phenomenon of locking happens in shallow waters, so the depth of around 1.2 meters of seawater produces enough pressure to cause the locking effect. Putting

the head under water up to 1.5 meters can cause severe pain in ears, unless one starts to equalize the gas spaces. Equalizing means that a diver has to actively add gas to the middle ear by blowing through the Eustachian tubes. I already mentioned swallowing and yawning, the most "natural" ways of equalizing the ears. Some people have the ability to voluntarily open the muscles adjacent to the Eustachian tube without applying any technique; those can stop reading my descriptions and happily continue to dive without any pressure induced ear problems. Hopefully, most divers will continue reading this, because I will list all known ear equalizing techniques accompanied with short descriptions how to perform them. One can practice on land before going diving; it will reduce the fear of popping the ears for the novice divers.

## VALSALVA

Perhaps the most popular equalizing method is the technique described by Antonio Maria Valsalva in 1704. It involves blowing against a pinched, blocked nose so that the air is forced up the Eustachian tubes, thereby equalizing the middle ear. It might unfortunately be performed too forcefully, leading to the inner ear problems. Therefore the safest recommendation to divers is to blow a little bit harder than it would take to inflate a large balloon and to never perform an uninterrupted attempt of more than 5 seconds.



## TOYNBEE

Joseph Toynbee described a technique of pinching the nose and swallowing simultaneously. The action of the soft palate and adjacent muscles then opens the Eustachian tube while the pressure wave in the throat moves the air in and out of the middle ear.

## FRENZEL

A German flight surgeon, Herman Frenzel, described a technique for the benefit of the Stuka pilots in World War II. It involves moving the tongue backwards quickly against the soft palate, thereby creating a pressure wave as well as positioning the muscles for the easy equalization. The technique is even better when combined with the pinching of the nose. If you pinch your nose, close your mouth and try to say "kick" at the back of the mouth, that should equalise the ears and you mastered the Frenzel manoeuvre.

## TWITCHING

This is a good starting technique for the people who are not familiar with equalizing. While pinching the nose, swiftly turn your head to the side. The ear facing forward generally equalizes.

## HEAD TILTING

This technique is designed to correct the unequal equalising. Many divers find that one ear is more difficult to equalize than the other.

The head is tilted sideways from the neck (so as to pointing the "bad ear" upwards) while keeping the shoulders in a horizontal position. This stretches the folds around the Eustachian tube, making equalising easier.

## EDMONDS

This technique exploits the effect of jutting the jaw forwards. Again, this manoeuvre tends to open the Eustachian tube, and should be combined with other equalising techniques, for example Valsava or Toynbee.

## LOWRY

Another combined technique described by Christopher Lowry may be useful to improve equalising in general. It involves pinching the nose and blowing against the blocked nose while swallowing simultaneously. It is impractical with the regulator in place, but can be used as a learning method on land.

Any of these techniques should be applied as soon as the head gets underwater, without waiting for the first meter of the descent, and should be continued regularly for the first 10 meters of descent. Deeper than 10 meters, a diver can equalize the ears "on demand" when the pressure is felt. I've seen many patients with different pressure induced ear problems, and many times I heard that it was initially very painful and once the diver went deeper, the pain

was either tolerable or gone. But the damage was already done to the fine structures of the ear, and the consequences like hearing loss can become life long. One should always keep in mind Boyle's law which says that the volume of a fixed mass of gas is inversely proportional to the pressure at a constant temperature and conclude that this change (in response to the pressure) is much smaller in deeper than in shallow waters, therefore the pain is felt near the surface and not at depth.

Divers should know how to preserve and protect their ears. Upon discovering any equalising problem or ear pain, further descent should be immediately halted: STOP. The diver should then ascend one to two meters, to reverse the locked-blocked situation. Various techniques for ear equalising may then be attempted, bearing in mind that the ear should never be forced, and no attempt at blowing should exceed 5 seconds. If all these measures fail, the dive should be ended.

There is a proverb saying that judges should have two ears, both alike. When it comes to diving, ears are the best judges if the descent should be continued.

*Dr. Karin Vela is a Diving Medicine physician EDTC/ECHM Ila working in Dubai London Specialty Hospital.*

## DUBAI AQUARIUM AND EMIRATES DIVING ASSOCIATION Celebrating 40 Years of Conserving our Great Nation

**40** روح الاتحاد  
**SPIRIT OF THE UNION**  
اليوم الوطني  
NATIONAL DAY  
الإمارات العربية المتحدة  
UNITED ARAB EMIRATES



CITIZEN.

EDA were invited to celebrate the 40<sup>th</sup> National Day in the Dubai Aquarium on Wednesday 30<sup>th</sup> November, 7-9pm with 24 EDA Members.

**HAPPY 40<sup>th</sup> NATIONAL DAY TO EVERYONE!**  
From the EDA Team



# UPCOMING EVENTS

## NATIONAL DAY AQUARIUM DIVE

30 November 2011 – Dubai Aquarium, Dubai Mall

## WORLD GREEN TOURISM

5-7 December 2011, Abu Dhabi

## DUBAI/EDA JOINT MOVIE SCREENING

14 December 2011

## EDA/COCA COLA JOINT MOVIE SCREENING

18 January 2012

## DMEX 2012 (DIVE MIDDLE EAST EXHIBITION)

13-17 March held at Dubai International Boat Show, Mina Seyahi

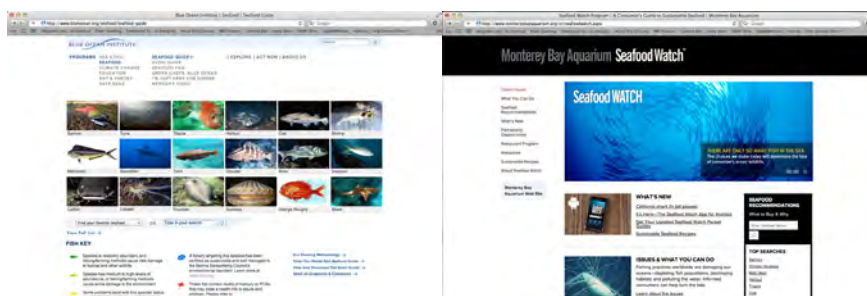
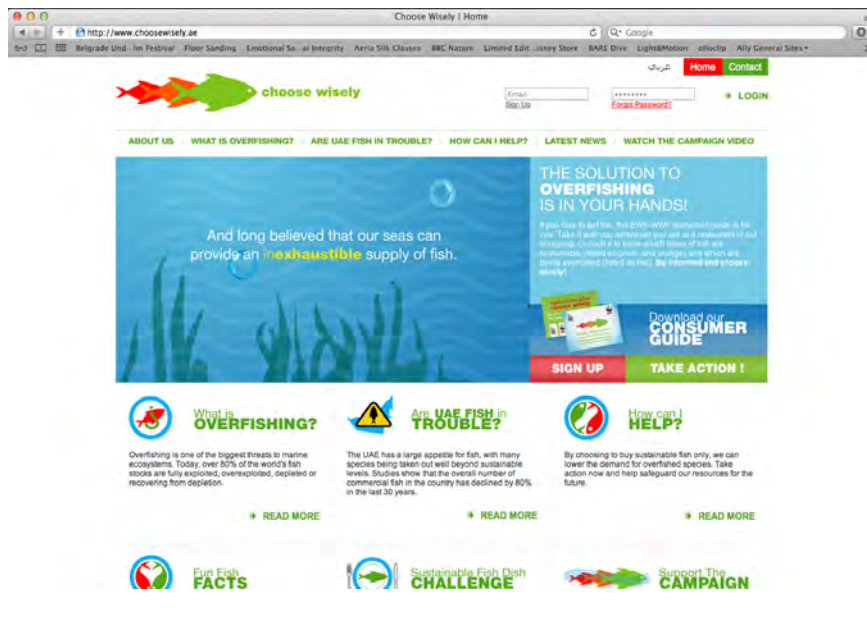
## EDA MARKET DAY

March 2012 (Date TBC)

# INTERESTING LINKS AND RESOURCES

## SUSTAINABLE FISHERIES

- <http://www.choosewisely.ae>
- <http://www.blueocean.org/seafood/seafood-guide>
- <http://www.montereybayaquarium.org/cr/seafoodwatch.aspx>



**Chairperson** Faraj Butti Al Muhairbi

**Vice Chairperson** Essa Al Ghurair

**The Secretary General** Jamal Bu Hannad

**Financial Director** Khalfan Khalfan Al Mohiari

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

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

**Technical Advisor** Ahmed bin Byat

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### MISSION STATEMENT

To conserve, protect and restore the UAE 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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UNITED ARAB EMIRATES