



# EDA

جمعية الإمارات للغوص  
Emirates Diving Association

## DIVERS FOR THE ENVIRONMENT

JUNE 2008, VOLUME 4, ISSUE 2

# IYOR 2008

INTERNATIONAL YEAR OF THE REEF

### THE PAVILION DIVE CENTRE

ECO DIVER CHALLENGE

### SPILLING THE BEANS ON OIL SPILLS

IS THERE A FUTURE FOR MARINE TURTLES IN THE MIDDLE EAST?

# DIVING IN DJIBOUTI

DISCOVERING A PART OF EAST AFRICA



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### DIVERS FOR THE ENVIRONMENT

Please note that EDA's magazine, "Divers for the Environment" includes articles written by individuals whose opinions, whilst valid, may or may not represent that of EDA. It is hoped that the magazine can become a platform for individuals to voice their opinion on marine and diving related issues. You are welcome to submit an article for the next issue of "Divers for the Environment" released in September 2008. Send all articles/comments to Head Office: [diving@emiratesdiving.com](mailto:diving@emiratesdiving.com).

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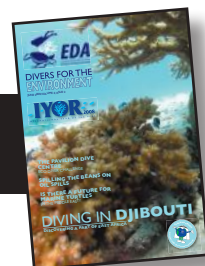
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PHOTO BY FRANCIS UY



Please recycle this magazine after you have read it.

# IT'S NOT ONLY ABOUT DIVING...



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Welcome to the second issue of our newsletter for this year.

EDA has been busy with events such as the Dive Middle East Exhibition (DMEX) 2008 which was a great success and we got 100% occupancy, Earth Day, World Environment Day, school presentations, special exhibits, International Year of the Reef (IYOR) and Dibba Management Plan dives.

I would like to thank the active EDA members and volunteers who have been supporting our activities, especially the Coral Reef Awareness and Monitoring Programme (CRAMP) members who have committed to doing the monthly dives until December. I look forward to seeing some new faces that will join CRAMP and continue the reef monitoring that we are doing at Dibba Rock.

In the last month, I have been travelling like crazy. One official business trip took me to Amsterdam and I was very happy to learn that we have some EDA members over there. Yes, we are now everywhere.

I went on two other trips (diving, of course) that were very interesting and very inspiring - Maldives and Djibouti. You can read about the Maldives trip in the destination pages. Regarding the trip to Djibouti, it was exceptional and it made me think about so many other aspects of diving. It's not only about the dive gear and dive sites and all the dive procedures that we know. I believe it has gone beyond that now. For me, it is about meeting new people from other cultures. I really enjoyed the opportunity to go and dive there, to be exposed to new dive sites and marine life that I may not have seen in the UAE, but even more so to the new experiences, the exotic food and meeting new and interesting people. Thank you to Djibouti Kempinski Palace Hotel and Daallo Airlines for the wonderful experience we had over there.

Lastly, I would like to say goodbye to our Projects Coordinator, Mrs. Melrose

Valencia Kravchenok, who recently got married and is starting her own family. We welcome, although belatedly, our new Secretary, Racquel Valerio, whom you may already be acquainted with by phone or email; Mr. Juma'a Bin Thalith who is running EDA's Heritage Department; Ms. Ally Landes who in addition to her creative work in our magazine will be assisting in the Members services and Ms. Rita Bento who will be in charge of the Research and Environment in EDA.

With new faces and fresh blood in EDA, we do hope you continue to support us in our aim to conserve and preserve the UAE marine resources.

Eco Regards,

Ibrahim N. Al-Zu'bi

# CO-OPERATION WITH DIVER GROUP EXTENDS TO COMMERCIAL DIVING

FEATURE AND PHOTOGRAPHY **DIVER MAGAZINE**

The DIVER Group is the UK's leading multimedia business specializing in consumer and B2B products for markets associated with the underwater environment. Consumer products include a wide variety of books for divers (some of which are printed in the UAE), the very popular diving website [www.divernet.com](http://www.divernet.com), the two big international Dive Shows in London and Birmingham, and the best-selling monthly magazine DIVER.

Following EDA's successful co-operation over the supply DIVER Magazine to members, DIVER Group has agreed to introduce one of its B2B titles, Underwater Contractor International (UCi) to relevant companies and individuals in the Emirates.

UCi is a high-quality bi-monthly publication catering for the commercial underwater industry, covering all sectors of offshore, inshore and inland activity. It is recognised by governmental, commercial and learned organisations as a primary vehicle for communicating with and disseminating information to the whole industry. Distribution of the magazine includes all members of the Society for Underwater Technology (SUT), the Association of Diving Contractors (ADC) and the International Diving Schools Association (IDSA).

John Bevan, who is the editor of UCI, has worked in the underwater industry since 1968. His varied experience includes deep diving research for the Royal Navy and technical management and consultancy for Comex and Comex John Brown. John has run his own successful underwater engineering consultancy company, Submex Ltd, since 1976 and also publishes 'The Professional Divers Handbook'.

Due to the big increase in commercial and scientific underwater activity in the UAE in recent years, UCI is keen to focus on these developments and would like to invite news releases and feature material. All potential contributions should be sent to the magazine's managing editor, Daniel Johnson: [daniel@divermag.co.uk](mailto:daniel@divermag.co.uk).

Free subscriptions to UCI are also being offered to personnel involved in commercial and scientific underwater work in the region. You can take advantage of this offer by emailing your details to: [jenny@divermag.co.uk](mailto:jenny@divermag.co.uk).



## DIVER MAGAZINE

DIVER Magazine is the UK's best-selling monthly publication for divers. It is the flagship of the DIVER Group which also publishes books for divers, including the annual DIVER Travel Guide, and runs the two big Dive Shows in London and Birmingham each year.

DIVER's excellent reputation has been built up over 45 years of publication, initially under the title Triton. In the early years of scuba diving, founder-publisher Bernard Eaton worked tirelessly to promote the growth of the sport and ran a series of landmark underwater photography and film festivals in Brighton which attracted celebrity divers from all over the world, such as Jacques Cousteau, Hans and Lotte Hass, and Ron and Valerie Taylor.

Bernard Eaton has received several international and British awards, recognising his invaluable contribution to the development of sport diving and marine conservation. These awards include his induction to the International Scuba Diving Hall of Fame when it was first established in America in 2000 (<http://www.scubahalloffame.com>).

Launched in 1963 as Triton, DIVER Magazine served until 1998 as the British Sub-Aqua Club's members' magazine, while selling additionally on the open market. For the last 10 years it has been a fully independent title, catering without bias for discerning divers from all training organizations, including PADI which has the lion's share of the UK market.

DIVER Magazine also has a very strong internet presence in [www.divernet.com](http://www.divernet.com). Launched in 1996, Divernet offers visitors a wealth of news and information about all diving-related subjects, several popular forums and a twice-monthly email newsletter.

EDA has negotiated a special offer for member dive centres interested in advertising in DIVER Magazine's Holiday Directory. This facility, which also includes a listing on Divernet, costs only GBP330 per year (12 issues), payable in advance. The special offer allows members a guaranteed picture with their directory entry for 6 months, free-of-charge (normally GBP165). For further details of this offer and other advertising opportunities, email [jenny@divermag.co.uk](mailto:jenny@divermag.co.uk). For subscription details, email [teresa@divermag.co.uk](mailto:teresa@divermag.co.uk).

# NEW COURSE DIRECTOR LEADS NEW CANDIDATES IN IDC

FEATURE AND PHOTOGRAPHY **AL BOOM**



# Al Boom Diving



Francis Uy

## Fun and hard work as new instructor candidates prepare for the Instructor Exam.

"Preparing for the Instructor Exam (IE) is a great challenge. The general idea is that the Divemaster course is the tough one, and the Instructor Development Course is far easier, but that is not easy to believe when you're in the middle of the IDC!" said instructor candidate Gordon Alexander.

At Al Boom Diving, under the guidance of newly appointed Course Director Francis Uy, three candidates (Gordon Alexander, Gareth Paterson and Rey Riose) recently prepared for the IE held recently in Dubai.

"The candidates were all very strong but the important thing was to build up their self-confidence as potential instructors and fine-tune their presentation and leadership skills during the IDC," said Francis.

During the build-up to the IDC, the candidates had the opportunity to assist the Al Boom instructors in leading classes to gain some first hand knowledge of what it is like to take on the leadership role. Their diving skills, although already excellent, were fine-tuned diving at Al Aqah, Fujairah and in the Musandam.

At the actual IDC, candidates worked through the fun and challenging classroom, pool and open water sessions, taking breaks only to visit the favorite hamburger café on Beach Road.

"When it came to our rescue scenario presentations, we had some rough seas to contend with," said Gareth Paterson, "but this was probably the best, as the actual rescues in the IE seemed much easier!"

"As a new Course Director, I really wanted my candidates to do well, and I can say that they certainly did themselves proud," commented Francis.

After many long sessions and practices, the candidates went into the Instructor Exam and did extremely well. All three are now certified PADI instructors.

"This was a challenging and hugely rewarding experience," said Gordon, "I can highly recommend it to anyone thinking about going pro!"

The next IDC will be held in October with Francis at Al Boom Diving. For further information, please call: **04 342 2993**.



## GO DIVE AT GO SPORT

Go Sport has introduced a shop in shop concept to cater to the serious diver, offering diving equipment, courses, and dives in their store at the Mall of the Emirates. The Go Sport store is ideally located next to Ski Dubai, Oakley and Ripcurl, catering to the adventure sports market.

The diving kiosk is manned by Al Boom Diving who have two Divemasters in store to offer help and advice to all levels of divers, from beginners who just want to try diving, to enthusiastic divers who may want to explore the diving available in Fujairah and the Musandam.

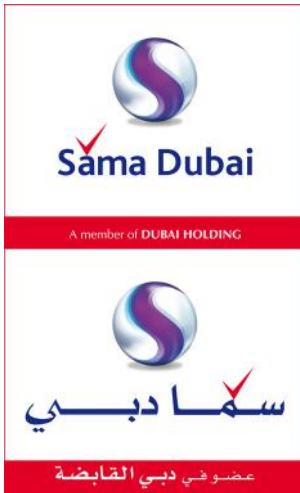
"We wanted to offer specialist dive courses and equipment in store to enhance the consumer offering from Go Sport," says Malcolm Schulz, Senior Brand Manager, Sports from Go Sport. "Go Sport customers can now book courses and dive trips as well as purchase their equipment in Mall of the Emirates."



Newly certified PADI Instructors Gordon Alexander, Rey Riose and Gareth Paterson with Al Boom Course Director Francis Uy.

# EDA SUPPORTS SAMA

DUBAI'S ENVIRONMENTAL AWARENESS CAMPAIGN



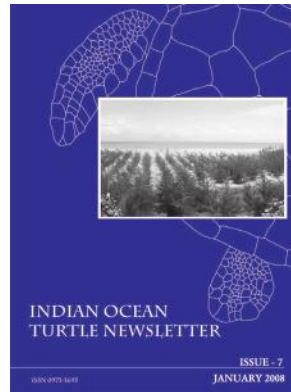
EDA recently joined the road show organized by Sama Dubai for its first Environmental Responsibility Campaign. EDA was among the several organizations and companies invited to exhibit at the event which included Envirophone, Emirates Green Building Council, DEWA and Nomad Ocean Adventures, among others.

EDA's Environmental Advisor, Ibrahim Al-Zu'bi, was also invited to give a short talk about EDA's mission and activities.

The campaign's aim was to raise Sama Dubai's employees' understanding of sustainable development and enlist their involvement in safeguarding and protecting the environment.



# EDA REPRESENTS UAE IN IOTN EDITORIAL BOARD



EDA recently joined the Editorial Board of the Indian Ocean Turtle Newsletter (IOTN) as country representative. EDA became the 15<sup>th</sup> board member among representatives from Africa, Asia and the Middle East.

EDA's task is to send information to the Editorial Board on turtle research being done in the UAE, as well as distribute the newsletter to individuals, research institutions, schools, colleges, government and non-government organizations, interested in marine

turtle biology and conservation.

The Indian Ocean Turtle Newsletter was initiated to provide a forum for exchange of information on sea turtle biology and conservation, management and education and awareness activities in the Indian subcontinent, Indian Ocean region, and South/Southeast Asia. The newsletter also intends to cover related aspects such as coastal zone management, fisheries and marine biology.

The newsletter is provided free of cost and can also be downloaded at: [www.seaturtle.org/iotn](http://www.seaturtle.org/iotn) in pdf and html formats.

Please contact EDA at: 04 393 9390 if you would like to be included in the mailing list.



## IOSEA DVD AVAILABLE AT EDA

EDA has several copies of the IOSEA MoU (Indian Ocean – Southeast Asian Marine Turtle Memorandum of Understanding) DVD aimed at promoting awareness of marine turtle conservation issues in the Indian Ocean – South-East Asia region.

The DVD consist of an Educational version (4:20 minutes) and a Public Announcement version (1 minute).

If you are interested to get a copy, and help spread the word about sea turtle conservation, please email us at: [diving@emiratesdiving.com](mailto:diving@emiratesdiving.com)

If you know of any schools who would be interested in these materials, please feel to forward this information to them. For more information, please visit: <http://www.ioseaturtles.org/>

# PROJECT AWARE

## ANNOUNCE GLOBAL INTERNATIONAL YEAR OF THE REEF

# ART CONTEST

### EVERY ACT COUNTS

Bristol, UK – As part of this year's International Year of the Reef 2008 activities, Project AWARE Foundation is calling all children around the globe to grab their paint brushes and crayons to celebrate our amazing coral reef ecosystems by participating in the AWARE Kids International Year of the Reef art contest under the theme "Celebrate the Reef - Every Act Counts". The contest is open to all children ages 3 to 12 years old and all entries must be posted by the 30<sup>th</sup> September and reach Project AWARE by the 2<sup>nd</sup> October 2008.



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

Coral reefs are under threat. For the first time in history, the IUCN (World Conservation Union) Red List of Threatened Species includes corals in its annual report of wildlife going extinct. More than half the world's coral reefs could die in less than 25 years. And healthy reefs are tremendously valuable to thriving ecosystems, human health and global economies.

"Today's children and young adults are environmentally conscious and eager to get involved in protecting the aquatic ecosystems" said Suzanne Pleydell, Project AWARE Foundation (International) Director. "One way to make sure that what we do today will be beneficial for our children tomorrow is to get them involved in environmental activities and educate them to protect our environment. The AWARE Kids programme and the AWARE Kids International Year of the Reef Art Contest offer a unique opportunity for children and their parents to get involved in fun and educational activities which can make a difference".

#### HOW TO ENTER:

1. Use a regular notebook-sized, blank piece of paper (8 1/2 x 11" or A4 maximum size) to draw an underwater scene. Use as much of the paper as possible and remember to tell Project AWARE what we can do to protect coral reefs.

2. Add children's name, age and address on the reverse of the artwork. Mail just one entry per AWARE Kid to the Project AWARE office nearest you, using the contact information found on our Contact Us page.

3. Send your entry before the 2<sup>nd</sup> October 2008 to your local Project AWARE office.

Lesson plans, games and activities on coral reefs and their importance to our ecosystem can be found in the AWARE Kids Teachers Guide, DVD and AWARE Kids activity book.

For more information, visit [www.projectaware.org/kids](http://www.projectaware.org/kids) or contact [info@projectaware.org.uk](mailto:info@projectaware.org.uk)

*One first prize winner and two runners up will be chosen from each global region and age group – 3 to 5 yrs, 6 to 8 yrs and 9 to 12 yrs.*

*Selected winners will receive a special Coral Reef Ambassador Plaque along with a certificate and other prizes and recognition globally.*

*Winning prizes include a Sealife Reefmaster Camera courtesy of Cameras Underwater Ltd, a 5 day dive pack for 2 (qualified divers) and 2 Bubblemaker/Discover Scuba Diver (non-divers over 8) (Terms and Conditions apply) courtesy of Red Sea Diving College.*



Drawing by Filippos Minaretzis Taronis

# EDA SUPPORTS

## THE THIRD UAE NATIONAL LIFEGUARD CHAMPIONSHIP



As a way to promote safety, EDA lent its support to the third National Lifeguard Championship held recently at Le Meridien Al Aqah Beach Resort in Fujairah.

The UAE's most qualified lifeguards battled it out in a rigorous seven-event relay competition determining the region's top lifeguard at the Third National Lifeguard Championships at Le Meridien Al Aqah Beach Resort on Sunday.

The one-day event, which brought together 14 teams from around the region including, for the first time, one guest team from Qatar, highlighted the importance of water safety across the UAE with a diversity of intense relay races and obstacles carried out on the East Coast resort shoreline and pool. The competitions consisted of beach runs, swims, sprints, and rescues as well as pool lifesaving techniques all testing the lifeguards' stamina, agility, speed, swimming capabilities, and emergency and rescue techniques.

After a demanding day in the sun, Dubai Municipality took home the UAE National Lifeguard Championship trophy and won a GCC holiday voucher, which includes flights with Emirates Airline. Wild Wadi was awarded

second place and Le Royal Méridien came in third. The individual winner award went to Mr. Vitaliy Siversky of the Intercontinental Hotel, Qatar.

The championships were open to all qualified lifeguards employed at hotels, resorts, swimming pools and beaches across the UAE, with teams consisting of four lifeguards. The championships have been designed to raise the profile of the competition by rewarding the abilities of qualified pool and beach lifeguards whilst at the same time increasing awareness about the importance of water safety.

Under the auspices of Le Méridien Al Aqah and the Institute of Qualified Lifeguards – with sponsorship secured from Emirates Airline, Royal Lifesaving Society UK (RLSS), the Institute of Sport and Recreation Management (ISRM), water safety products from the US, Johnson Diversey, Al Boom Marine, Oakley, Emirates Diving Association, Leisure training and advisory services, O'Neill, Al Boom Diving, and PRM International, Mac Fashion – the event is growing in popularity year after year and makes for exciting spectator viewing as teams compete in staged emergency situations and endurance-testing fitness runs and swims.



# DIVERS JOIN FACEBOOK

## TO SHARE THEIR PASSION FOR UNDERWATER CONSERVATION

Facebook is a tool that has clearly taken on a valuable outlook on ways of sharing information where the community can get involved and interact directly online voicing their opinion.

Emirates Diving Association has placed its own page on the site, enabling members to communicate directly with other members and keep in the loop with updates as well as target other relevant pages and sites that are of interest to our mission.

**EDA'S FACEBOOK LINK:** [http://www.facebook.com/group.php?gid=26\\_05600716](http://www.facebook.com/group.php?gid=26_05600716)

Project AWARE Foundation, a registered non profit organisation dedicated to conserving underwater environments through education, advocacy and action, has developed a "Project AWARE Fan Page" on the popular social networking website Facebook aimed at challenging existing and new Facebook users to carry out simple actions that could help protect precious aquatic resources.

"Since we created the page, SCUBA Divers and water enthusiasts from all around the world have signed up to Facebook to join our community of eco divers, invite their friends, and get inspired to take part in Project AWARE activities such as beach and underwater cleanups in their local area" commented Suzanne Pleydell, Project AWARE Foundation (International) Director.

Domino Albert, Project AWARE Foundation (International) Marketing & Fund-raising Coordinator, added: "In addition to the traditional marketing and fund-raising methods that charities use to encourage new supporters to join their cause, Facebook offers a unique opportunity to engage with a traditionally difficult market: younger people who largely socialise online. Facebook has captured the public imagination and we hope that it will prove to be an invaluable tool for Project AWARE to socialise online with passionate conservationists, recruit new volunteers, and inspire divers who use Facebook to take action and spread the Project AWARE philosophy".

The new "Project AWARE Fan Page" includes photos, videos, a discussion board, news items and gives you the opportunity to add and post your own comments, photos and videos.

Find us on Facebook to discover more about Project AWARE activities. Sign in to Facebook and click "Become a fan" on the new Project AWARE page.

Click the "Share with friends" link on the right to invite all your friends on Facebook to join our growing community of eco divers.

Project AWARE has also set up a Project AWARE Cause application which lets you make donations. So please recruit your friends to the Project AWARE Cause or Fan Page and help us raise vital funds. See you there...

**facebook** Profile edit Friends Inbox home account privacy logout

**Emirates Diving Association (EDA)** Global

**Information** edit

**Group Info**  
 Type: Sports & Recreation - Recreational Sports  
 Description: Mission Statement  
 To conserve, protect and restore the U.A.E. marine resources by understanding and promoting the marine environment and promote environmental diving.  
 Legislation: Emirates Diving Association (EDA) was established by Federal Decree No. (23) under Article No. (21) on 23/02/1995 and chose Dubai as its base. The Decree stipulates the following responsibilities for EDA:  
 Legislate 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.  
 The Association's Objectives  
 EDA believes that divers can be extremely useful in conserving the marine environment through observing, reporting and preventing environmental abuse.

**Officers** edit  
 Ibrahim Al-Zu'bi (United Arab Emirates) Senior coordinator  
 Ally Landes Graphic Designer, Photographer, Film Maker [ remove ]

**Related Groups**  
 The Pavilion Dive Centre Sports & Recreation - Extreme Sports  
 Scuba Diving in United Arab Emirates Sports & Recreation - Water Sports  
 Al Boom Dive Club

**facebook** Sign Up Sign up for Facebook to see more and connect with Project AWARE Foundation . Already a Member? Login

**Project AWARE Foundation** Browse more Non-Profits

**Divers Conserving Underwater Environments**

**Information**  
 Website: <http://www.projectaware.org>  
 Company Overview: Project AWARE Foundation is a nonprofit environmental organisation working with divers and water enthusiasts to conserve underwater environments through education, advocacy and action.  
 Mission: Diver conserving underwater environments.  
 Calling all eco divers! If you're interested in taking action to conserve underwater environments - join us here. Find out about underwater activities, environmental alerts and projects to protect your favorite dive sites around the world.

**Fans**  
 6 of 879 fans

**Posted Items Pro**  
 7 of 7  
 Cast Your Vote for the 2009 Project AWARE Certification Card!  
 Tell us what image you'd like featured on the next Project AWARE version of the PADI certification card. With a minimum donation toward conservation, divers and PADI members can receive this new certification or replacement card in 2009. Will your top choice be the winner?  
 add a comment  
 70 Million Sharks

# WORLD ENVIRONMENT DAY: 2008

EDA JOINS IBN BATTUTA MALL BLUE FAIR ON WORLD ENVIRONMENT DAY  
PHOTOGRAPHY ALLY LANDES

EDA took part in the World Environment Day (WED) Blue Fair Exhibit at Ibn Battuta Mall. This year's theme, "Kick the CO<sub>2</sub> habit: towards a low carbon economy" signified the need for the government industry, communities and each one of us to take immediate action to mitigate the release of CO<sub>2</sub> and other greenhouse gases and ameliorate the problem of global warming and climate change.

The three-day long exhibit featured activities for everyone in the family along with presentations by local organizations in the areas of energy, education, transportation and public awareness. The Blue Fair showcased eco-friendly initiatives by EDA, DEWA, ENOC, The Children's Garden, Al Boom Diving, Environment Friends Society, and Imdaad. With colourful stands and interactive sessions, many of the exhibitors focused on educating the next generation about the importance of respecting and preserving nature.

A special screening of the hard-hitting eco-documentary The 11<sup>th</sup> hour was also held at the mall to an audience of special invitees including government officials and the media.



# EDA CELEBRATES EARTH DAY *Le* MERIDIEN

AL AQAH BEACH RESORT  
FUJAIRAH

EDA, together with Le Meridien Al Aqah Beach Resort, hosted an Earth Day celebration at the hotel.

The event saw EDA divers with their friends and families, together with the hotel staff and crew, cleaning up the beach and dive sites in Dibba, Fujairah. Other participants who joined were from Dibba Municipality, Ministry of Environment & Water, George Manson University and Fujairah Rotana Resort & Spa.

Special guest for the event was Ms. Wafa Huraibi, EDA member from Kuwait. Wafa is the first female NAUI COURSE Director in the Middle East. She was awarded the NAUI Environment Enrichment Award last year at DEMA 2007 in the US. Wafa presented a token of appreciation to EDA for supporting her and her dive team from the Kuwait Oil Company.

The event was capped by tree planting, involving EDA members and Le Meridien staff.



Photo by Ally Landes



Photo supplied by Le Meridien



Photo supplied by Le Meridien



Members signing up for clean up. Photo by Ally Landes



Ms. Wafa Huraibi. Photo by Ally Landes



Divers getting ready to set off. Photo supplied by Le Meridien

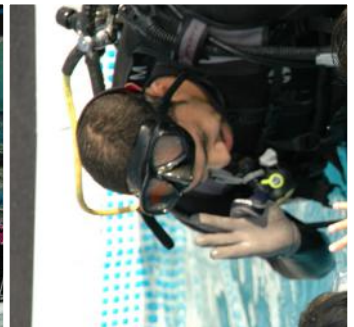
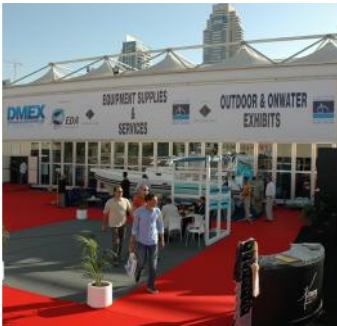
# THE DIVE MIDDLE EAST EXHIBITION DMEX 2008

PHOTOGRAPHY **ALLY LANDES**

The Dive Middle East Exhibition (DMEX) 2008 was held within the Dubai International Boat Show (DIBS) for the second time running.

It featured an indoor exhibit and an outdoor interactive dive pool used for scuba diving demos and trial dives by AI Boom Diving, Scuba Dubai, and Beuchat.

A total of 18 exhibitors from the UAE and nearby regions showcased their operations to the local diving community.



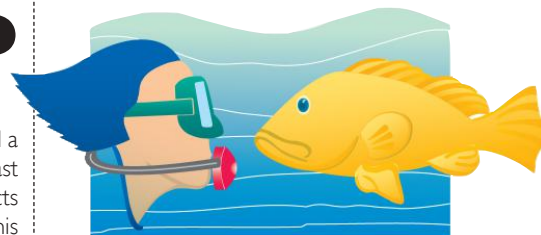
# DIBBA MANAGEMENT PLAN DIVE FOR CRAMP

On the 6<sup>th</sup> of June EDA conducted the first CRAMP dive. Finally, after a few arrangements and a few meetings, EDA's Marine Biologist Rita Bento and three EDA members went off to the East Coast to perform a dive in the Dibba Marine Protected Area. A total of 5 permanent transects were placed inside the protected area, covering a total of three different habitats. During this year of 2008, at least one dive a month will be made to collect data along these transects. The first dive was made possible due to the support of The Palm dive centre on the east coast, to which we are greatly thankful.

The first step is always the hardest, but it has now been taken and we would like to thank Vesela, Kim and Nizar for being a part of it.



## AL BOOM DIVING PROJECT AWARE CENTRE



**PROJECT  
AWARE®**

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



Al Boom Diving is now a PADI Project AWARE Official Partner; one of the first in the region.

The Project AWARE Foundation is the dive industry's leading non-profit environmental organization. It raises funds for the protection of the environment and encourages environmentally aware practices for divers. Project AWARE also runs the International Cleanup Day and Dive for Earth Day.

As a Project AWARE Official Partner, Al Boom Diving pledges to encourage safe and eco-friendly dive practices and commit to minimize the impact of their divers on the environment. Al Boom Diving will also be running fund raising activities for Project AWARE.

"We would like to place more mooring buoys on the East Coast, as many have been removed or are damaged," says Francis Uy, Course Director at Al Boom Diving. "From promoting the Project AWARE certification cards to direct fund raising for Project AWARE, we would like to make a contribution."

Protection of the environment is a concern for all divers and all dive centres. Project AWARE has outlined the "10 ways a diver can protect the underwater environment" and "10 tips for underwater photographers" in an effort to raise awareness of the environment through education.

A number of projects from Project AWARE are in place to put conservation into action, amongst which are: Protect the Sharks Project; Coral Reef Monitoring and the International Whale Shark Project.

To find out how you can help, visit: [www.projectaware.org](http://www.projectaware.org). Visit Al Boom Diving at: [www.alboomdiving.com](http://www.alboomdiving.com)

### REEF CHECK INTERNATIONAL PHOTO CONTEST 2008

On behalf of the Reef Check Foundation, I would like to invite you to participate in the International Photo Contest "WHAT DO REEFS MEAN TO YOU?" that Reef Check is organizing in celebration of the International Year of the Reef 2008. Photo submissions open July 1 - August 31, 2008. The goal of this contest is to inspire people, through images, to appreciate reefs and take actions to protect them. For more information please visit [http://reefcheck.org/photo\\_contest/default.php](http://reefcheck.org/photo_contest/default.php).

In addition to submitting and/or voting for photos, you can also participate by:

- Placing a banner on your website linking to the Contest homepage: [http://reefcheck.org/photo\\_contest/default.php](http://reefcheck.org/photo_contest/default.php). Banners can be downloaded from: [http://reefcheck.org/photo\\_contest/rc\\_photo\\_contest\\_spread.php](http://reefcheck.org/photo_contest/rc_photo_contest_spread.php).
- Downloading and posting a Photo Contest poster in your favourite dive shop and or other target locations. Posters in English, Spanish, Chinese, and Japanese can be downloaded from: [http://reefcheck.org/photo\\_contest/rc\\_photo\\_contest\\_spread.php](http://reefcheck.org/photo_contest/rc_photo_contest_spread.php).
- Forwarding this email to others to invite them to participate. Please let me know if you will be able to collaborate with Reef Check in this effort, and we thank you in advance for your time and consideration.

# RESPECT DIVE

FEATURE **DR. KHALDOON NABHAN** (NEW EDA MEMBER BEING THE FIRST DMPD VOLUNTEER)  
(DMPD - DIBBA MANAGEMENT PLAN DIVE) PHOTOGRAPHY **RITA BENTO**



compass. The visibility was between 10-15 metres with moderate currents, our diving depth was around 7 metres and our bottom time was 44 minutes.

After that we get back to our research center and we get back to Dubai by 1400.

I have to say that I felt great knowing that I took part in something to help our marine life and act out my social responsibility for environmental issues. It does not

matter what you did as everyone can respect the effort you put into it.

We have all heard about some of the different types of diving specialities there are, such as the Deep dive, Wreck dive, Night dive, etc, but I don't recall there being a name for a voluntary dive. We should have a speciality dive name for voluntary dives and name it a Respect dive. All of us enjoy the dive sites along the coast of the UAE and especially on the East coast of Fujairah and Dibba. Few of us though, ask how we can keep those sites safe, protecting our corals and beautiful aquatic creatures free from pollution, especially from oil spills.

On the 13<sup>th</sup> May 2008, I had the opportunity to contribute to protecting our beautiful marine sites in the UAE by participating in a project run by our Protégée Marine Biologist, Rita Bento for her project of the Dibba Management plan. Rita is re-engineering Dibba's environmental site with the cooperation from EDA, the Ministry of Environment and Water, Dibba's Marine Research Centre and Fujairah's Municipality.

We met in Dubai at 0700, and we reached Dibba's Marine Research Centre by 0915.

Everyone welcomed us in a friendly and respectful way and we had a chat regarding the marine life in Dibba and the research conducted by Rita Bento.

All our equipment was prepared for us and we then got on board the boat that took us to Dibba Rock, 10 minutes from Dibba port.

We geared up and started our dive by 1020 and I have to say that it's a magical site.

I was able to see different types of fish like, the parrot fish, sweetlips and snappers together with a lobster and the magical corals and starfish. Rita was taking photographs to identify the different corals while I handled the

A volunteer dive is a respect dive; respect to our environment, our marine life, our health and our society. I would like to suggest all divers to make time even during the week to take this step to enjoy the respect dive, to feel the great satisfaction and to thank god for what we can see and enjoy in our UAE waters.



## EDA'S SCHOOL PRESENTATIONS



EDA Marine Biologist, Rita Bento recently gave a presentation on Global Warming to members of Deira International School's Environmental Club. The club, called Ecubed: Emancipating Everyone's Earth (E3), held an environmental workshop with the final goal of starting a school-wide can collection drive which they will eventually give to a recycling organization.

EDA Projects Coordinator Melrose Valencia also gave a short presentation to a group of school children from Royal Dubai School who did their very first beach clean up at Jumeirah Beach.



## EDA QUIZ TURTLES

ANSWERS FOUND ON PAGE 50

1. **What's the difference between a turtle and a tortoise?**
  - a. Turtles live in water; while tortoises live on land
  - b. Turtles are tortoises, but tortoises are not turtles
  - c. Turtles give birth to live young, while tortoises lay eggs
  - d. There is actually no difference between them.
2. **Some sea turtles:**
  - a. Migrate to nesting areas like birds
  - b. Sing elaborate mating calls like birds
  - c. Are warm-blooded like birds
  - d. Have feathers on their shells like birds
3. **The upper part, or back, of a sea turtle's shell is called the:**
  - a. Plastron
  - b. Carapace
  - c. Scute
  - d. Scale
4. **Many aquatic turtles catch preys by:**
  - a. Using a net made of seaweed and floss
  - b. Chasing them into rocks and coral
  - c. Stabbing them with their claws
  - d. Sucking them into their mouths
5. **Sea turtles must leave the oceans to lay eggs:**
  - a. True
  - b. False
6. **While a female sea turtle is nesting, she appears to shed "tears", but the turtle is really:**
  - a. Secreting extra water and fluids from her body
  - b. Secreting extra salt and fluids from her body
  - c. Secreting sand and fluids from her body
  - d. Secreting sugar and fluids from her body
7. **The sex of an embryo is determined by:**
  - a. The time of fertilization
  - b. The environmental temperature
  - c. The male sex appeal
  - d. Genetics
8. **The Leatherback Turtle's shell is unusual because:**
  - a. It is composed of one enormous bone
  - b. It is made of cowhide
  - c. It is relatively soft and flexible
  - d. It is the turtle's spine
9. **This turtle gets its name because of its exceptionally large head:**
  - a. Leatherback sea turtle
  - b. Hawksbill sea turtle
  - c. Loggerhead sea turtle
  - d. Green sea turtle
10. **Which sea turtle species dives the deepest, travels the furthest and grows the largest?**
  - a. Leatherback sea turtle
  - b. Hawksbill sea turtle
  - c. Loggerhead sea turtle
  - d. Green sea turtle
11. **The green turtle gets its name from?**
  - a. The colour of its shell
  - b. The colour of its body fat
  - c. The colour of the algae it eats
  - d. His environment awareness
12. **What is the principal threat to sea turtles?**
  - a. Human activities (beach development, pollution, fishing nets, etc)
  - b. Natural predators (sharks, dogs, crabs, etc)
  - c. Global Warming
  - d. Natural diseases

# AMBASSADOR LAGOON

FEATURE **RITA BENTO** PHOTOGRAPHY **ALLY LANDES**



Who would have ever thought that we would one day end up doing fun dives in an aquarium? It's probably one idea that few divers have had or imagined possible. Those that do it, rarely do it for fun... it becomes part of the job, to clean the aquarium glass.

This April, EDA was invited to be a part of the first fun dive in the Ambassador Lagoon at the Atlantis – The Palm.

Entering an aquarium with an incredibly large volume of water, to know the exact monitored water temperature, the precise visibility expected and the exact amount of marine animals that one will encounter on a dive doesn't happen every day. During this event, there wasn't one diver that didn't have an enormous smile protruding from his regulator.

This was a calm and crystal clear dive where the EDA Dubai committee and CRAMP volunteers discovered the beauty of the UAE water's rich marine life. We did a dive among thousands of local fish, including groupers, jacks, snappers, fusiliers, grunts, angel fish, butterfly fish and much more. We look forward to seeing the new additions that will enter the aquarium after they have been through the quarantine process. For this unique moment we would like to thank Steve Kaiser and all the staff at the Ambassador Lagoon for a thrilling and educational day.





# DISCOVERING THE ATLANTIS

FEATURE **VESELA TODOROVA** PHOTOGRAPHY **ALLY LANDES**

A VERSION OF THIS ARTICLE WILL RUN IN THE NATIONAL

Why would the owner of one of the world's largest open-air aquariums choose to fill it with fish caught in the UAE?

This is how the majority of people here will react when told about the decision of Kerzner International, a leading resort developer.

It is not surprising that this question comes up – the country's seafaring traditions are fast becoming a thing of the past and most residents have only seen a hammour on their dinner plate.

But for marine expert, Steve Kaiser, the decision was a no-brainer.

The aquarium is opening this September but Mr. Kaiser made his choice to focus on local fish four years ago when his project, the Ambassador Lagoon at Atlantis, The Palm, was only an idea on an architect's drawing board.

"When I first got here, people were saying there are no fish," said Mr. Kaiser, Vice President – Marine Sciences and Engineering for the resort.

However, Mr. Kaiser quickly changed peoples misconceptions. He saw that the UAE reefs and sea grass beds support species which could help him create a magnificent display. And, looking at the 11 million-litre aquarium, it does not take long to realise that the man who launched several other large projects before coming to Dubai was right from the start.

Swimming in the filtered, temperature-controlled lagoon are large schools of young golden trevally fish, their bright yellow bodies intersected by vertical black stripes. There are also rainbow runners, which true to their name, strike the viewer with hues of blue, green, olive, white and yellow. Swimming past them are red snappers and their cousins, the hammours – with spiky dorsal fins and spotted bodies in grey, light green or brown.

The aquarium also shelters some of the most colorful reef fish – the Arabian angelfish which is dark blue with bright yellow spots on each side; the Arabian picasso triggerfish which looks as if it was adorned by the talented Spaniard himself; and the Clown fish which provided the inspiration for the main character in the movie, Finding Nemo.

"This really is a showcase for the UAE and Dubai," said Mr. Kaiser.

All the fish swimming in the tank are caught within a range of 75 miles from Dubai. After arrival, they are put in quarantine and then released into the tank. "Right now, we have 60 different species and we hope to have well over a hundred before the launch," said Mr. Kaiser. He hopes that the new arrivals will include sharks and stingrays as well as more reef fish to add colour to the tank.

Mr. Kaiser was not willing to discuss the number of fish sharing the tank. Anyone who has explored the UAE's reefs will realize why this is the case – it will be impossible to see such a large number of fish sharing a space of this size in nature, a fact that Mr. Kaiser acknowledged.

"If you make it look like it does in nature, which probably has a fraction of the fish we have, how do you wow someone?" he asked. And for him, installing a sense of awe into visitors, is a main priority.

"I am never going to win the argument with someone who says fish should not be kept in an aquarium," he said. "To me, the aquarium is a tool to get people excited about these animals."

He said the aquarium could work to promote conservation on a grassroots level.

"Everyone eats hammour but how many people have actually seen one? For someone who is 70 years old, do they not count? Should they not be educated? How do you take someone's grandmother diving?"

Rather than having to read about the fish they see in the facility, visitors will have trained people, referred to by the management as 'navigators', who will explain and answer questions. Mr. Kaiser said he plans on launching outreach programmes with schools in Dubai.

"We hope to be seen as a centre for marine education," he said.

Another advantage of having local fish is that they can be released back into the open water if they are not doing well in captivity, something that a facility relying on exotic fish would not be able to do.

Critics have long pointed out that aquariums, through their reliance on exotic fish traders, might be threatening the very species they want to showcase. A report, released in 2003, by the United Nations Environment Programme, says that over 20 million fish and about half as many other forms of marine life are caught every year for the trade. Although the trade is mainly legitimate, some practices such as the use of sodium cyanide have been criticised as a threat to reefs. The poison is squirted into corals where the fish live. It is then easy for the fishermen to catch the stunned tropical fish. However, the practice kills coral and other species with the fish themselves arriving at their destination with extensive internal damage.

However, the report also highlighted that, if managed well, the trade could help promote the conservation of reefs. Mr. Kaiser said that the aquarium uses a local contractor and has specified procedures for fishermen to follow.

Once the fish arrive in the aquarium, they are "pampered guests", said Mr. Kaiser. "All the food we give them is restaurant quality," he said.

The menu includes shrimp, squid, sardines and minnows for the carnivores and up to 70kg of lettuce per week for algae-eaters.

In addition to the lagoon, the resort will also feature a maze of underground tunnels, known as the Lost Chambers. This area will feature 21 smaller exhibits, some of them featuring species from other parts of the world such as piranhas and moon jellyfish. The maze will include tanks filled with starfish, pencil urchins, horse shoe crabs, known as the spiders of the sea, and other sea creatures. A shark lagoon and a dolphin bay have also been planned.

The whole system of facilities, which also includes a lagoon with dolphins and another one filled with sharks, will use more than 42 million litres of sea water, which is taken from the sea and filtered and treated with ozone to ensure quality. The system tries to mimic what the marine animals would experience if they were living in the wild with changes in the surroundings and fluctuations in temperature introduced to correspond to seasonal ups and downs.

# THE PAVILION DIVE CENTRE ECO DIVER CHALLENGE

FEATURE ERNST VAN DER POLL

We would like to introduce you to a very unique opportunity through the Pavilion Dive Centre's (PDC) Eco Diver Challenge. The Eco Diver Challenge is a flexible 10 week program aimed at increasing people's environmental awareness and responsibility for the conservation of our oceans ecosystem.

The Eco Diver Challenge looks at global and local issues regarding our delicate marine life, its threats and what we can do locally to contribute to its preservation.

The package is broken down into 5 PADI specialties and a UNEP Sustainable lifestyle and Responsible consumption work shop.

- The National Geographic
- AWARE – Protect Our Living Reef
- AWARE – Fish Identification
- Reef Surveyor
- Peak Performance Buoyancy
- YXC Training on Responsible Consumption

For more details you can visit the websites:

[www.projectaware.org](http://www.projectaware.org)  
[www.reefcheck.org](http://www.reefcheck.org)  
[www.padi.com/ng/](http://www.padi.com/ng/)  
[www.youthxchange.net](http://www.youthxchange.net)

The Eco Diver Challenge can fit into your schedule by attending a knowledge development session once a week plus field trips/diving exploration at the weekends. The package includes:

- Five 3-hour knowledge development sessions
- Five practical sessions (inc. 2 field trips & data collection in the Musandam)
- 8 scuba dives

The package is aimed at divers, age 12 plus, with their PADI Open Water certification, however, if people are interested in the package who do not have their Open Water certification PDC can teach the course first. The PADI Open Water course costs Dhs 2350.

This is a unique opportunity for people to gain a lot of personal development through discovering a fun and exhilarating way to spend free time. You will become more environmentally conscious and socially responsible through education. This also offers a unique opportunity for a company that wants to combine Corporate Social Responsibility with team building.



## THE ECO DIVER CHALLENGE COSTS

(per person total of 5 Specialty courses)

National Geographic	1400Dhs
AWARE – Protect Our Living Reef	1300Dhs
AWARE – Fish Identification	1300Dhs
Reef Surveyor	1400Dhs
Peak Performance Buoyancy	1300Dhs
Youth Xchange Training Workshop	No Charge
<b>TOTAL</b>	<b>6700 Dhs</b>
<b>LESS 20%</b>	<b>5360 Dhs</b>

The 5 specialties can also count towards the Master Scuba Diver Challenge which is the highest accolade that can be achieved by a recreational diver. The Master Scuba Diver rating credits count highly towards the Duke of Edinburgh Awards and also counts towards extra credits from various Universities.



Photo by Sara Shoemaker Lind

## NATIONAL GEOGRAPHIC DIVER

As a National Geographic Diver, you join an elite group of explorers, adventurers and conservationists. The insight and training you gain during this program will broaden your awareness and take your diving skills to a new level. You'll learn to observe and explore like an underwater scientist.

Your experience begins with the PADI Open Water Diver program, enhanced with adventures unique to the National Geographic Diver program. You will learn to explore with detail, identify important underwater features and navigate with certainty. You will have the diving knowledge and practice to maneuver with poise along the reef's ecosystems.

Whether you're new to scuba diving, or an experienced diver, the National Geographic Diver program will give you new tools to understand and safely explore the underwater world.

Your adventure begins with the National Geographic Diver certification, where you'll gain the knowledge and practical experience to live the diving life.

- You'll learn basic dive skills and safety information through the PADI Open Water Diver course.
- You'll be introduced to worldwide dive environments and opportunities by interacting with the National Geographic Diver Almanac and DVD.
- You'll learn to fine-tune your buoyancy to hover easily and manoeuvre carefully through delicate aquatic habitats.
- You'll learn how to observe your surroundings in order to get the best experience from each dive. You'll gain practical experience by gathering information and collecting images to create a visual representation of a dive site, detailing what you've discovered through your observations.
- You'll improve your navigation skills and ability to find your way around underwater by using a compass as well as natural references.
- You'll be introduced to a multitude of aquatic species and be able to identify local plants and animals.
- To start your National Geographic adventure, visit a PADI National Geographic Dive Centre near you.

## PROJECT AWARE

"In the end, we will conserve only what we love, we will love only what we understand and we will understand only what we are taught." Baba Dioum, Senegalese Conservationist.

Conservation begins with understanding the need to protect waters necessary for life. Each year Project AWARE introduces a new public awareness and education campaign to address environmental issues and involve individuals in solutions. Project AWARE also teaches enthusiasts how to sustainably interact with aquatic resources and apply these skills to conservation.



### PROTECT THE LIVING REEF

Coral reefs need our serious attention. Termed the "rainforests of the sea", coral reefs are home to one of every four marine species and are vital to maintaining the biological diversity of ocean ecosystems.

Existing for over 200 million years, these ecosystems are the oldest most productive on earth. Aside from their environmental importance, coral reefs are extremely important to local economies, tourism, fishing industries, human health and more. Yet we are suffering the loss of this vast resource at an alarming rate.

Scientists' estimate approximately 25% of the world's coral reefs are already destroyed. If current trends continue, we risk losing this resource entirely within the next 30-50 years. But the situation isn't hopeless. There is still so much we can do to preserve these colourful undersea gardens for future generations.

Protect the Living Reef looks at the threats affecting our reefs, such as sedimentation, destructive fishing practices and coastal development. It also covers what we can do to help the survival of our reefs including supporting the establishment of coral reef protected areas, choose tour operators that use mooring buoys rather than anchors when diving and reporting all damage of coral reefs to dive operators and scientific or conservation groups that monitor coral reef health.

### FISH IDENTIFICATION

Have you ever asked yourself, "What was that?" The PADI Project AWARE Fish Identification Specialty course provides you with the fish identification basics so that next time, you know the answer. During two dives you gain hands-on experience in looking for and identifying the fascinating fish you see underwater.

### REEF SURVEYOR

Reef Check's mission is to educate the general public about the importance of coral reefs and threats to their health; provide scientific monitoring programs to measure coral reef health on a global basis; and empower communities with the tools necessary to effectively manage their local coral reefs.

The Reef Check program brings together community groups, government departments, and academia and business partners to:

- Educate the public about the coral reef crisis and issues facing California's coastal ecosystem.
- Create a global network of volunteer teams to regularly monitor and report on reef health.
- Scientifically investigate reef ecosystem processes.
- Facilitate collaboration among academia, NGOs, governments and businesses.
- Stimulate local community action to protect remaining pristine reefs and rehabilitate damaged reefs worldwide using ecologically sound and economically sustainable solutions.

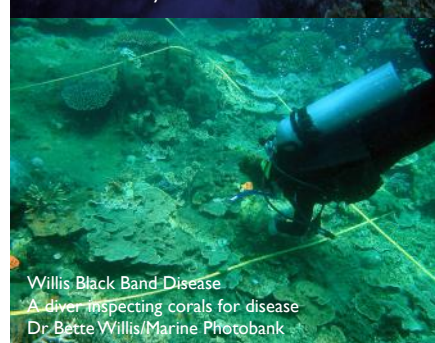
Reef check will allow local communities in Dubai to become part of this international network of volunteers. You will learn how to apply the scientific monitoring techniques to some of the UAE's precious coral reef areas. You will carry out coral reef monitoring dives on an on-going basis throughout the year and submit your data for the analysis by the Reef Check Foundation scientists.

### THE PAVILION DIVE CENTRE

Tel: +971 4 406 8827 / 8828

Fax: +971 4 348 4754

divecentre@jumeirah.com



# THE ECO DIVER CHALLENGE SCHEDULE JULY - AUGUST 2008

DATE/TIME	DURATION	LOCATION	ACTIVITY	DETAILS
Week 1 04/07/08 16h00	1.5 hrs	PDC	Registration	<b>Classroom session</b> <ul style="list-style-type: none"> <li>• Paper work completed</li> <li>• Pack / materials distributed</li> <li>• Orientation &amp; PwP Presentation (focus on National Geographic)</li> </ul>
Week 2 11/07/08 16h00	3 hrs	PDC	Coral AWARE	<b>Classroom session</b> <ul style="list-style-type: none"> <li>• Knowledge Review</li> <li>• DVD</li> </ul>
Week 3 18/07/08 13h00	3 hrs	PDC	National Geographic	<b>Classroom session</b> <ul style="list-style-type: none"> <li>• Knowledge Review</li> </ul> <b>Practical</b> <ul style="list-style-type: none"> <li>• W. Coast dive (1) inc. PPB &amp; Navigation</li> </ul>
Week 4 26/07/08 13h00	3 hrs	PDC	Fish ID	<b>Classroom session</b> <ul style="list-style-type: none"> <li>• David Attenborough DVD</li> <li>• PwP Presentation</li> </ul>
Week 5 01/08/08 16h00	3 hrs	PDC	Reef Surveyor	<b>Classroom session</b> <ul style="list-style-type: none"> <li>• PwP Presentation</li> <li>• DVD</li> <li>• Transect practice</li> </ul>
Week 6 08/08/08 08h15	3 hrs	PDC	Reef Surveyor & PPB clinic	<b>Practical</b> <ul style="list-style-type: none"> <li>• Transect practice on beach</li> <li>• Pool dive (2) inc. PPB &amp; transect plotting</li> </ul>
Week 7 15/08/08 08h15	3 hrs	PDC	Peak Performance Buoyancy Specialty	<b>Practical</b> <ul style="list-style-type: none"> <li>• W. Coast dive (3&amp;4) inc. identification &amp; transect practice.</li> </ul>
Week 8 22/08/08 05h15	Whole Day	East Coast	Fish ID & National Geographic	<b>Practical</b> <ul style="list-style-type: none"> <li>• Mussandam dive (5&amp;6) inc. identification &amp; Exploration</li> </ul>
Week 9 29/08/08	Whole Day	East Coast	Reef Surveyor	<b>Practical</b> <ul style="list-style-type: none"> <li>• Transect &amp; data collection dives on the East coast (7&amp;8) for Reef Check analysis</li> <li>• (Beach Clean Up for under 12 year olds)</li> </ul>
Week 10 16h00	3 hrs	PDC	YXC training on responsible consumption & Debrief	<b>Classroom session</b> <ul style="list-style-type: none"> <li>• PwP Presentation of YXC &amp; Tawasul</li> <li>• Recognition and reward</li> </ul>

**NOTE:** One week between all activities is recommended as independent study is often required.

# SUNSCREEN

## MAY BE KILLING CORALS

FEATURE **MICHALLE KOVACEVIC**

*Reprinted with permission from Cosmos ([www.cosmosmagazine.com](http://www.cosmosmagazine.com))*



**SYDNEY:** The chemicals in sunscreen that protect swimmers from sunburn may also be indirectly striking a deadly blow to coral reefs, a new study has found.

"Our results should be considered as a warning about the use of these chemicals and as a claim for further research to develop new eco-friendly sunscreens," said Antonio Pusceddu, marine scientist from the Polytechnic University of Marche in Italy and co-author of the study reported in the journal *Environmental Health Perspectives*.

### THREATENING FACTORS

Coral reefs are one of the world's most diverse ecosystems but 60 per cent are threatened by factors including climate change and pollution.

In recent decades, coral 'bleaching' has become a major problem. This occurs when symbiotic algae that lives inside coral tissues die, thus exposing the "naked" white coral skeleton, said Pusceddu. Bleaching itself has been linked to rising temperatures, toxins and ultraviolet light.

To probe their hunch that chemicals in sunscreen might be having an effect on coral bleaching, Pusceddu and his team collected small pieces of coral from tropical reefs in the Indian, Atlantic and Pacific Oceans.

They exposed these samples to varying concentrations of sunscreen, starting at just 10 microlitres per litre of seawater. The results showed that even at these low doses the chemicals could induce the release of viruses within the corals that caused bleaching.

These chemicals - primarily parabens, cinnamates, benzophenones and camphor derivatives - boosted the activity of pathogenic viruses that had otherwise lain dormant within the algae, and triggered a mass die-off, leading to bleaching.

The sunscreen resulted in the release of a near 15 times more virus than in the coral not exposed to it, the researchers reported, completely

bleaching the coral within 96 hours.

### UNPROVEN IMPACTS

Some experts are yet to be persuaded by the findings, however:

"Any contaminant can experimentally damage a coral under artificially high concentrations. The amount in the wild must be tiny due to dilution," commented Terry Hughes, director of the Australian Research Council's Centre of Excellence for Coral Reef Studies at James Cook University in Queensland.

"Imagine how much water a tourist wearing one teaspoon of sunscreen swims through in an hour-long snorkel. Compared to real threats like global warming, runoff and overfishing, any impact of sunscreen is unproven and undoubtedly trivial," he said.

However, Pusceddu argued that the coral response to sunscreen exposure was not dose dependent, "The mechanism appears to be on-off: thus once the virus has been switched on by the chemicals in sunscreen, toxicity is irrelevant."

Ove Hoegh-Guldberg, director of marine studies at the University of Queensland in Brisbane, said the study is interesting, but notes that many factors are likely to be responsible. "Bleaching is like a runny nose: there are lots of things that could cause it."

Though sunscreens may contribute to coral death, virus-caused bleaching is only a small part of the big picture, he said: "Climate related bleaching is a direct consequence of heat stress and does not involve viruses or bacteria."

Prior to the publication of the study, several marine reserves in Mexico had already banned the use of sunscreen products by reef snorkellers and divers after they observed high mortality of reef organisms in popular swimming areas.

# SPILLING THE BEANS ON OIL SPILLS

FEATURE **RITA BENTO** PHOTOGRAPHY **DIVERS DOWN & JEFFREY CATANJAL**

(Editor's Note: This article was inspired by the recent oil spills witnessed on the East Coast.)



Oil Spill. Photo by Divers Down.

All of us must have already heard about oil spills all over the world, or even in a place near us. We all felt insignificant as we tried to help and find out, unfortunately, there is little or nothing we can do. In some countries, there are departments in the government that accept volunteers to work with them when the spill reaches the sand or affects several marine animals. This is not what we usually see, especially in regions where oil spills tend to take place.

Oil spills can happen in land, rivers, bays, and in the ocean. They can be caused by different sources: people making mistakes or being careless, equipment breaking down, natural disasters such as hurricanes, deliberate acts by terrorists, countries at war, vandals, or illegal dumpers. Most of the oil spills are caused by accidents involving tankers, barges, pipelines, refineries and storage facilities, usually while the oil is being transported.

Oil is lighter than water, so it floats on the surface as a slick, forming a thin layer. The slick spreads rapidly over the surface of the water and it decreases steadily as time passes. An oil spill moves in the same direction and at similar speed as the water, depending on currents, tide and wind. As the spreading process continues, the layer becomes thinner and thinner, finally becoming a very thin layer, which often looks like a rainbow. Depending on the oil type, the force of gravity can cause some of the oil to travel through the water and settle on the bottom. The oil can also stay in the upper layers of the water column by the natural wave action.

## DIFFERENT TYPES OF OILS

The oil spill grade of impact depends on oil type. Various types can affect the environment differently and require a different plan of action to clean up. Here is a list of the four oil groups and their summary of characteristics:

### VERY LIGHT OILS

(*Jet Fuels, Gasoline*)

These oils are highly volatile and have high concentrations of toxic soluble compounds. They produce localized and severe impacts on water column and intertidal resources. Until now, there is no cleanup possible.

### LIGHT OILS

(*Diesel, No. 2 Fuel Oil, Light Crudes*)

The light oils are moderately volatile, have moderate concentrations of toxic soluble compounds and leave residue after a few days. Fortunately, in these types of oils, cleanups can be very effective.

### MEDIUM OILS

(*Most Crude Oils*)

About one-third of a medium oil spill will evaporate within 24 hours but the contamination with this type of oil in intertidal areas can be severe and long-term. Its impact on waterfowl and fur-bearing mammals can be severe. Cleanups on this type are most effective if conducted quickly.

### HEAVY OILS

(*Heavy Crude Oils, No. 6 Fuel Oil, Bunker C*)

Heavy oils have little or no evaporation or dissolution. The contaminations with heavy oils in intertidal areas cause severe impacts to

waterfowl and fur-bearing mammals. If the slick reaches the sediments, we can have a possible long-term contamination. The shoreline cleanups are difficult under all conditions.

## HISTORY

Oil spills happen all around the world. In the thousands of oil spills that have been recorded, there are two that are worth mentioning, the Exxon Valdez incident and the Gulf war:

The Exxon Valdez incident was a major oil spill that took place on March 24, 1989 at Prince William Sound in Alaska. Due to icebergs in the planned route of Exxon Valdez, the drivers decided to go in another direction. On the new route, the oil tanker hit shallow land, the Bligh Reef. It spilled 10.8 million gallons of oil into the marine environment and affected more than 1,100 miles of non-continuous Alaskan coastline.

Talking about numbers and records, the biggest oil spill in the world occurred during the Persian Gulf War. In January of 1991, Iraq deliberately released 240–460 million gallons of crude oil into the Persian Gulf from tankers 10 miles off Kuwait. Until now, it is considered as the most major oil spill ever seen in world history.

## Here are the ten “hot spots” for oil spills from vessels around the world:

- The Gulf of Mexico (267 spills)
- The north-eastern U.S. (140 spills)
- The Mediterranean Sea (127 spills)
- The Persian Gulf (108 spills)
- The North Sea (75 spills)
- Japan (60 spills)
- The Baltic Sea (52 spills)
- The United Kingdom and English Channel (49 spills)
- Malaysia and Singapore (39 spills)
- The west coast of France and north and west coasts of Spain (33 spills)

## WHAT'S THE HISTORY IN OUR REGION?

The oil spills in Arabian regions occur at varying degrees. We could have little oil spills occurring monthly but because of the small size, these go undocumented. Unfortunately, there have been severe cases, including the biggest one:

- 1972 in Oman: After a collision with Brazilian tanker Horta Barbosa, the South Korean tanker Sea Star spilled about 840,000 barrels of crude into the Gulf of Oman;
- 1983 in Iran: Nowruz Field platform spilled 80 million gallons of oil;
- 1991 in southern Kuwait: The record-breaking oil spill during the Persian Gulf War as previously mentioned;

- 1994 in the United Arab Emirates: 15,900 tons of crude oil leaked into the Arabian Sea from the Panamanian-flagged super tanker Seki after it collided with the UAE tanker Baynunah 10 miles (16 km) off the UAE port of Fujairah. Oil reached the UAE coast north of Khor Fakkan close to the Straits of Hormuz. The oil slick severely polluted several beaches and threatened more than 25 miles (40 km) of coastline;
- 2000 in the United Arab Emirates: The Honduran-flagged cargo vessel Al Jazya I sank 4 miles east of Abu Dhabi's coast, laden with 980 tons of fuel oil, due to bad weather;
- 2001 in the United Arab Emirates: The spill was caused by the Iraqi fuel tanker Zainab (now one of the UAE's dive spots), suspected of smuggling around 1,300 tons of fuel oil from Iraq, as it ran into trouble on its way to a holding area in international waters. The spill is said to be the Emirate's worst environmental disaster in years. The oil spill reached the reserved island of Jazirat Sir Bu Na'air, about 70 nautical miles off the coast of the Emirate of Sharjah;
- 2008 in the United Arab Emirates: There have been more than four small oil slicks on the East Coast. Unfortunately, little information is available regarding these occurrences. What is known is that the spills are caused by tankers being cleaned and instead of abiding the law, they dump their oil residues in the open waters. The amazing thing is that they prefer taking the risk and paying a Dh51 million fine rather than following the legal procedure. The oil spill often reaches the UAE coast, but according to official responses, these acts are done in international waters, so there is little or nothing that can be done (reference: an article printed in the Opinion section of The National, dated 11 May 2008).

## IMPACTS ON THE ENVIRONMENT

Depending on the circumstances, oil spills can be very damaging to marine birds and mammals as well as fish and invertebrates. Depending on where and when a spill happens, a few or up to hundreds, and even thousands, of birds and mammals can be killed or injured. Even small spills can severely affect marine wildlife. The main problem is that many birds and other animals ingest oil when they try to clean themselves, which can poison them.

Each oil spill will have a different impact on wildlife depending on the type of oil spilled and the location of the spill, the species of wildlife in the area, their timing of breeding cycles and seasonal migrations, and even the weather at sea during the oil spill.

Oil affects wildlife by coating their bodies with a thick layer. Many oils also become stickier over time so it adheres to wildlife even more. Unfortunately, fish can be attracted to the area due to the shadow the slick makes. As fish think it's a floating object or food, they get under it. This endangers sea birds, which are attracted to schools of fish and may dive through oil slicks to get to the fish. Marine mammals are likewise attracted to the area where oil spills occur.

**Oil spills affect the marine mammals in different ways, depending on the type of animal. The effects can occur instantly or as time passes by. In general, here are some of the principal effects on marine animals:**

## MARINE BIRDS

When oil gets stuck to the feathers of birds, it can cause hypothermia by reducing or destroying the insulation and waterproofing properties of their feathers. As a result, they tend to lose body weight as their metabolism tries to combat low body temperatures.



Jeffrey Catanjal

Because oiled feathers weigh more, birds are less able to fly, becoming an easy prey to their captors. Their sticky feathers cannot trap enough air between them to keep them buoyant so the birds also tend to sink. As they try to clean their feathers, they automatically swallow some oil, damaging the insides of their bodies, causing ulcers or bleeding in their stomachs, for example.

## MARINE MAMMALS

In the case of dugongs, oil sticks to the sensory hairs around their mouths causing inflammation or infection, making it difficult for them to eat. As they try to clean their bodies, they tend to ingest oil which naturally harms their insides. Damage to the airways and lungs can lead to congestion, pneumonia, emphysema and even death by breathing in droplets of oil, or oil fumes or gas. Oil can also damage the marine mammal's eyes, causing conjunctivitis and blindness, which, in turn, makes it difficult for them to find food, leading to starvation and ulcers.

## TURTLES

Sea turtles are of particular concern because their numbers are declining worldwide. If turtles surface in an oil slick to breathe, oil will affect their eyes and damage their airways or lungs, leading to various diseases or even death, as mentioned in the effects of oil spill on marine mammals.

Oil spills on beaches, where turtles breed, can cause contamination of eggs, adult turtles or newly hatched turtles. Eggs may be contaminated, either because there is oil in the sand high up on the beach at the nesting site, or because the adult turtles are oiled as they make their way across the oiled beach to the nesting site. Oiling of eggs may also inhibit their development.

## FISH

The eggs, larvae and young fish are comparatively sensitive to oil but there is no definite evidence from case histories to suggest that oil pollution has significant effects on fish populations in the open sea. This is partly because fish may take avoiding action and partly because the oil-induced deaths of young fish are often of little significance compared with huge natural losses each year through natural predation and fishing.



Photo by Sascha Regmann

# FEATURE

## SOLUTIONS

Because oil and oil products in the environment can cause harm, we need to prevent problems when we can.

Oil problems don't appear only from oil spills, they also get into the environment by normal waste. By avoiding dumping oil or oily waste into the sewer or garbage, we avoid polluting the environment we live in. We can find several ways to avoid using oil in the first place: bicycle, walk, or take the bus rather than taking a car. When we use less oil, less needs to be transported, and there's a lower risk of future oil spills. We should understand that it is because we rely on oil that we run the risk of oil spills. That means that all of us share both the responsibility for creating the problem of oil spills and the responsibility for finding ways to solve the problem.

If you witness an oil spill in our region, please contact the following:

### UAE COAST GUARD

Dubai: 04 345 0260  
Abu Dhabi: 02 673 1900  
Sharjah: 06 508 2005  
Fujairah: 09 238 0380  
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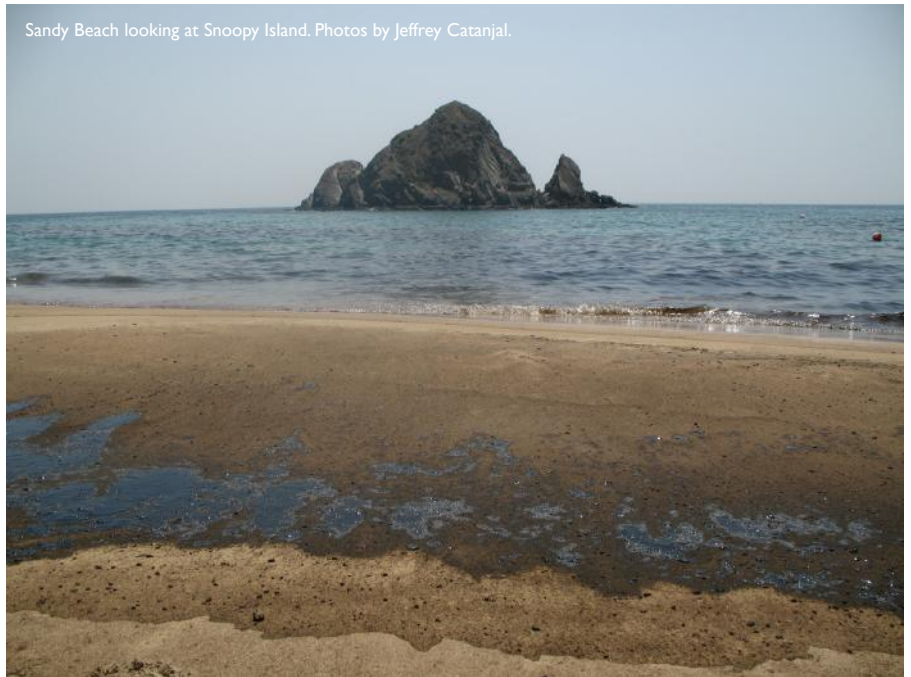
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Sandy Beach looking at Snoopy Island. Photos by Jeffrey Catanjal.



# IS THERE A FUTURE FOR MARINE TURTLES IN THE MIDDLE EAST?

FEATURE **NICOLAS J. PILCHER, PHD**



Green Turtle. Photo from EDA Library

Marine turtles have survived on earth for centuries. Our actions though, in particular in the 20<sup>th</sup> century, have brought many populations to the brink of extinction. Awakened in biologists' minds by the late Archie Carr, sea turtles have come to symbolise conservation efforts in a marine context. Because marine turtles migrate and disperse throughout the Middle East, their survival is dependent on conservation efforts spread over a wide area and in a wide range of marine and coastal habitats.

But let's take a step back for a minute and get technical. All marine turtles share similar life histories, varying slightly among species, and a quick look at their life history can indicate just how complex a group of species they have become: when physiologically ready (that is, when they are sexually mature and have accumulated the fat deposits necessary to go off and lay eggs for the first time), they migrate from distant feeding grounds to nesting areas and males and females mate during a period lasting 1 - 2 months. After mating, females take 2 - 4 weeks to emerge on the beach and lay the first clutch of eggs. After this first clutch, they may return 4 - 8 more times to lay again in the same season. Each nest contains around 100 eggs, which take about 60 days to incubate and hatch after dark, only when the sand surface cools. The hatchlings have to excavate through the sand for two or three days before emerging, and then crawl down the beach and head directly offshore using light, wave direction and the earth's magnetic field for guidance. They swim for one day in a 'swimming frenzy' to get as far offshore as possible, and after this they float as part of the sea's plankton for several years until they migrate from oceanic waters onshore to shallow feeding areas. After five to ten years they may grow to juveniles, 20 - 40 cm in length. They remain at their feeding grounds for 5 - 10 or more years until they reach sexual maturity, and undertake their first migration to the mating and nesting areas, whereupon the cycle is repeated. Take away any of these steps, or the habitats they require, or inject

massive mortality rates through such impacts as fisheries, and turtles will be no longer.

Today, there are seven extant species of sea turtles, and the World Conservation Union's Red List considers the Middle East's turtles as Vulnerable (the Loggerhead), Endangered (the Green) and Critically Endangered (the Hawksbill). They are irreplaceable ecological resources, in that they function as key individuals in a number of habitats, such as coral reefs and seagrass beds, and play the role of indicator species for the relative health of the areas they live in. These habitats have a tangible value to people of the region, in that they also support commercial fish and invertebrates (found in seagrass beds, open oceans and coral reefs, among others). On top of this, they can act as model flagships for conservation programmes, and because the conservation of turtles and their habitats addresses vast and diverse marine areas, they indirectly protect the complex and interconnected world on which human societies depend.

So where is the problem? Well, even though turtles are models of conservation in many countries, in the Middle East, they are being depleted through by-catch in ever-growing fisheries, and through habitat loss following coastal and marine development. Some populations have likely been depleted to such an extent as to be considered locally extinct. Because turtles are indicators of the health of various and diverse marine ecosystems, these losses should be construed as a void in our ability to sustain the present health of our oceans. To be honest, commitments made by various governments at the Rio Convention have, for the most part, failed to curb the major impacts, and we are faced with the potential loss of what are among the last descendants of the planet's prehistoric age. Habitats continue to be used up for domestic and industrial use, and insufficient regard is paid to long-term environmental consequences of development. And while the last 30 years have witnessed a meteoric increase in scientific knowledge on marine turtles, their environmental needs, reproductive cycles, habitat requirements and the like, not enough of this knowledge is yet incorporated into conservation projects in the region. It's a simple formula, really: No habitat to nest, no turtles laying eggs. No eggs, no hatchlings. No hatchlings, no turtles in the long run.

So what can we do? Well, laws alone can't do the whole job. Just here in the Middle

East Region, there is no doubt that there are sufficient laws to protect sea turtles (although probably not sufficient to protect their habitats). What is really lacking is strict adherence to environmental principles requiring not only wildlife protection but also that of the habitats they depend on to survive, and of offshore threats that are often unseen and 'out of sight' sufficiently to be also 'out of mind'. Marine turtles have already captured the hearts of the region's people and leaders. Their habitats lag far behind, unfortunately, and we will need to focus conservation efforts in the coming years to protect the remaining coastal and marine habitats they need, to address fisheries by-catch, particularly in gillnets and beach seines, and to enhance education projects across the region, targeting government, fishermen, developers, and the users themselves: the region's people and the tourism sector.

But I am an optimist, I am sure this can be done. It requires commitment. It requires an understanding of turtle needs beyond the up front face value, and of the benefits beyond the moral and existential. Turtles are an important component of marine ecosystems, and they offer benefits far beyond the tangible. Their conservation is a public process, not that of a handful of dedicated individuals. But conservation of these amazing animals has to be directly linked to their biology and evolutionary adaptations if it is to have any long-term measure of success. The continued presence of turtles in our seas and on our beaches is a matter that is entirely in our hands, and if we focus our energies on minimizing and mitigating our impacts at all stages of their lives, and promoting a new ocean awareness and care policy which is based on a balanced contribution from the diverse biological wealth they contain, it will never be at the cost of any single species, and certainly not a sea turtle!



Loggerhead Turtle. Photo by Mito Paz

**NICOLAS J. PILCHER, PHD**

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## THE MEAN OLD DADDY OF FREEDIVING

FEATURE SARA-LISE HAITH



*We have long ago surpassed the limits attainable by purely physical excellence and are now venturing into the terra incognita of our mental potential. Aharon Solomons*



Humans have been freediving for longer than we can remember. Since the early years of the 20<sup>th</sup> century, freedivers have long wanted to co-exist with marine life and experience the profound connection believed to exist with man and the underwater mammal. Born in the UK, American national Aharon Solomons, current US Masters Record Holder of the Mens Constant Weight, Dynamic Apnea and Free Immersion Disciplines, comes to the Emirates this August 2008 to share his indepth knowledge and experience with local freedivers. Solomons has been involved in military, research, commercial and sports diving education for more than 35 years prior to adopting freediving as his passion. At 69 years old, he is not only one of the world's most experienced freediving instructors, but also the oldest continuing "masters" level freediver.

He is accompanied by his dive partner Maria-Teresa Solomons (MT), who began freediving in Crete in 1996. She joined one of Aharon's clinics where she discovered her natural ability.

She has trained and worked uniquely in freediving since 1997, and after only five months of diving, was one of only a handful of women who could pass 50 metres on one breath, while six months pregnant. They are based in Mexico in Baja California. They come to us to bring knowledge to the freedivers and spearfishers of the UAE, in the hope that we can all learn and transmit new knowledge and safety to this growing sport.

Aharon and MT are instructors for 4 different freedive training agencies, and MT is about to attempt to another record in the championships in Mexico, to be held on 20<sup>th</sup> June at Xibalba. Aharon is attempting to better his Masters record this year, and hoping to hit 60m in the Constant Weight category.

Freedivers have always striven for deeper dives, longer times. Hypoxic training has recently become the focus of attention for many freediving athletes, who are looking for a drug-free and legal way to improve their performance and also to get that vital edge in competition. Divers who have exposed themselves to continuous high levels of hypoxia have evolved greatly and have developed strategies that exploit and explore it more than any other athletic discipline.

Aharon and MT have written a lot of literature about freediving and training techniques. They often receive the same questions from divers; "how can I get deeper?" Their answer is "What's

stopping you?", and the answer to this is usually specific 'equalisation' or concentration.

Further examination however often reveals that this answer is erroneous or actually, incomplete, as the real answer is usually a combination of factors. Tension, and that multi-headed undersea fictitious monster called the Hydra is often the culprit. We often fear things that do not actually exist, and they prevent us from completing the dive we want.

Technique and relaxation form a large part of becoming a freediver. With those two factors in check, the depth will come. Gliding is one of the secrets of deep diving and needs practice to reap the benefits of its by-product, which are energy and O<sub>2</sub> conservation. Flexibility is also a key factor, and Aharon and MT incorporate pranayamas and some yoga education into their courses, teaching freedivers how to maximize their physique and improve it for better performance, together with specific warm-up procedures, partner work, and dive line procedures.

Jaques Mayol used yoga techniques in freedive training but there was never clear exposition by him of what exactly he found to be most useful nor of what practice he constructed with it. Since Aharon/MT began teaching in 1995, it has been one of the main training regimens and over the course of the years and through trial and error and a lot of experimentation they have evolved what they consider to be a superior practice specifically for the freediver. It is only this year in fact that



# FEATURE

the APNEA ACADEMY is publishing a book on yoga for Freedivers. They are students of Pattabhi Jois, the founder of the Ashtanga Yoga system and one of the main three founders of Hatha yoga; and of Venkatesh, who is well established for his wealth of knowledge on Pranayama. Therefore Yoga is a strong note in their freedive training and we include it as part of our daily regimen in the courses.

Divers have to train themselves to be mentally strong, and not be distracted by anything surrounding them during a dive. The environmental distractions of current, cold, poor visibility, waves, etc. and the fears of blacking out, being short of breath on ascent and during a competition focusing so hard on the depth to be attained that one leaves the first equalization too late and makes an inelegant return to the surface. If a diver does not train himself to be strong mentally he can be distracted by anything – a fogging mask, or the inability to hold correct orientation on the surface due to the waves and current being a strong opponent. Simple things like forgetting to stretch, water in the snorkel or excessive water movement, are all factors that play on a divers mind and have to be put away in the recesses of the mind.

Aharon writes that freediving should be a pleasure, and not something you drive in yourself to achieve. He correctly states that some of the most profound progress can come when we are totally involved in play. Isn't that true in the workplace as well?

Some of you maybe thinking, gosh that's an old man to be doing that at his age!

Aharon's response to that is; age actually doesn't have a lot to do with it, but time does. One of the plusses about age is that one has had time to watch an awful lot of stories and experiences unfold. With regard to age, he realises that there might not be that many more opportunities for him. He still, however, entertains the hope that at some time in his sixties he will exceed his age in depth, but certainly had not planned to do this in his first competition in 1993, when he was 52. he obtained a depth of 57 metres.

Six years later, Aharon's records (December 2007), at the US Masters, stand at the following:

- **Constant weight** 50 metres
- **Free Immersion** 52 metres
- **Dynamic Apnea** 100 metres

Aharon and MT specialise in personal training for freedivers. I know one person personally who went from 35 metres to 58 metres in just a week's training with them. They have in-depth knowledge of the physiological and psychological blockages that freedivers may have and are able to work through those, teaching discipline with words of encouragement, and combining that with a profound knowledge

and experience. They have personally trained many of the successful competition freedivers up to record holding status, for example, Sam Still (UK National Champion and former World Record Holder in Static Apnea), Haaico Aldering (former all-round Dutch champion), Bevan Dewar (former South African Constant Weight Record Holder), Emma Farrell (AIDA Instructor Trainer), and they are currently training two current World Record Holders with the aim of reaching new depths in the near future. (Their names are withheld for confidentiality reasons).

They believe that a good freediving instructor is a keen observer and a good communicator, whose function is to discover each student's personal freedive objective. Students are taught as individuals with individual needs and personalities, and not as a group. They have a course syllabus, but each attention to the student is tailor-made.

Only a maximum of 4 students per course is accepted as training is personal and one-on-one. The courses are 5 days long and process are built slowly and systematically. They formulate a plan of progress with the student and leave him with the ability to progress systematically and safely on his/her own. Certification card collecting is not on Aharon and MT's agenda, rather they encourage an exchange and development of knowledge and skill, combined with personalized training based on a motto "Assess, Plan, Act". They develop qualities of self-confidence, the ability to concentrate and relax, and the ability to "deal with Murphy". (Aharon's words). The depth, experience and knowledge come with time, training, and discipline, and cannot be learnt in just one week of freediving.

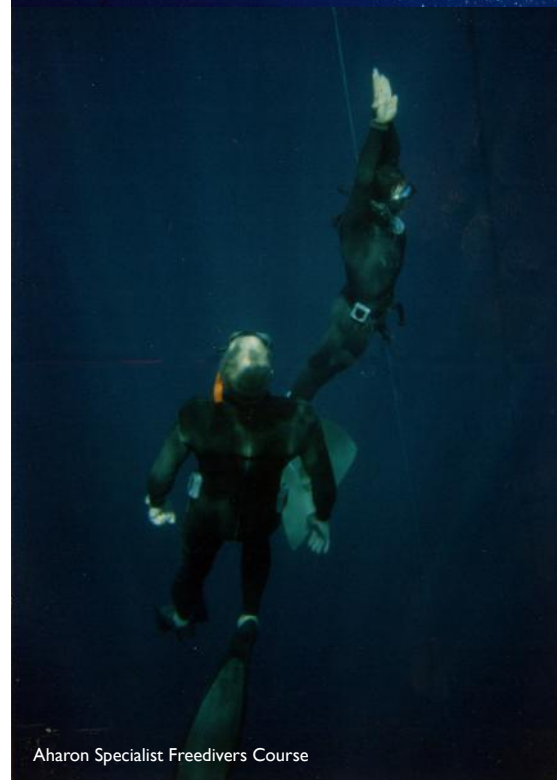
Aharon's background and training imposes discipline and in-depth training, with the ability to bring out the best in a diver. Freediving is a passion that he shares with all who come to him, and promises that we will learn to think, train and freedive for ourselves quickly. As he says – "he is a mean old Daddy".

We welcome Aharon and MT to the UAE and look forward to sharing the depths of our beautiful Arabian Gulf with them.

For information on Aharon and MT Solomons contact Sara-Lise Haith at: [diva@divasindubai.com](mailto:diva@divasindubai.com)



Aharon Specialist Freedivers Course



Aharon Specialist Freedivers Course



Sara-Lise Haith, Abu Dhabi 2008. Photo by Christa Loustalot.



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## UAE DIVERS IN THE MALDIVES

FEATURE AND PHOTOGRAPHY **DELPHIS DIVING CENTRES**

On Thursday the 15<sup>th</sup> of May 2008, a group of 17 experienced divers from the United Arab Emirates arrived on Royal Island. Our team at Delphis Diving Centers was happy to welcome them, and it was a nice surprise when we realized that some had been diving with Delphis 14 years earlier at Fun Island, and some also at Paradise Island. Thank you for coming back!

The following morning, we did our first dive together. In about 20 minutes the "Dhoni" (local diving boat) took us to our dive site called "Dhofanu Thila".

After all the divers had descended safely to the top of the reef, we started swimming to the edge, where the current hits the reef. That is usually the point that the fish like most, and we were greeted by schools of fusiliers who rushed past the divers. The fusiliers were being chased by giant trevallies and dog tooth tunas.

We continued our dive toward some overhangs, which are beautifully decorated with soft corals, and the divers happily took pictures of the stunning marine life inside. Suddenly, the silence was broken by the signaling device of our dive guide swimming ahead. As they looked to see what he was pointing at, one of the most fascinating under water scenes was displayed to them: Three Grey Reef Sharks

were swimming just in front of them. They watched the sharks slowly disappearing into the blue ocean. Slowly, the excited divers swam to the shallower part of the reef; not knowing what else there was to come. As our group reached the top of the reef, our guide noticed a large shadow on the reef. He quickly glanced to the surface. It was a huge Manta Ray. The divers hurried to take several photos of the beautiful Manta, which circled above them. As if our group was not yet lucky enough, suddenly three more elegant Manta Rays joined in, and they all swam graciously and elegantly above the amazed group of divers.

As the maximum dive time was almost reached, the divers were reluctant to begin their safety stop, which indicated the end of this fantastic underwater experience. On the surface, all the grief was quickly taken over by joy and excitement. The 17 divers were so happy that they kept on talking about the dive until we reached Royal Island, already looking forward to what else they would see during their remaining dives.

The Maldives are located in the Indian Ocean and formed by coral reefs. These reefs have formed on the edge of volcanoes, which submerged over many years. Mostly covered by sea, the Maldivian coral reefs are home to one of the world's most stunning fish and coral



life. Almost all the dive sites in the Maldives can have strong currents. The constant water movement brings in all the necessary nutrients, and is therefore an important factor which lures big fish into the dive sites. The depth varies depending on the atoll you visit: Dive sites inside the atoll tend to be shallower than the outside reefs. The topography is influenced by different kinds of coral reefs, which form the dive sites.

1. Thilas: bigger reefs or pinnacles which are submerged underwater.
2. Beru: outside reefs of the islands or reefs.
3. Giri: a large reef inside the atoll.
4. Kandu Olhi: channels between islands or reefs.

Since the Maldives are among the most popular dive destinations in the world, the government has implemented strong rules and regulations to avoid accidents. They are taking a lot of effort to increase the tourism in the Maldives. As a result, tourism has been introduced to the north and south of the Maldives, and the numbers of resorts have gradually increased over the past few years. The touristic islands range from simple to very luxurious resort islands.

Many resort islands are proud to have beautiful house reefs for diving and snorkeling. You can often see colourful butterfly fish, angel fish, sometimes turtles, eagle rays and sting rays there. If you are very lucky, you might encounter larger species such as manta rays and whalesharks if you come during the right season.

You will always have the choice to either dive and snorkel, or just relax and enjoy lying on the beach while listening to the sounds of the waves.

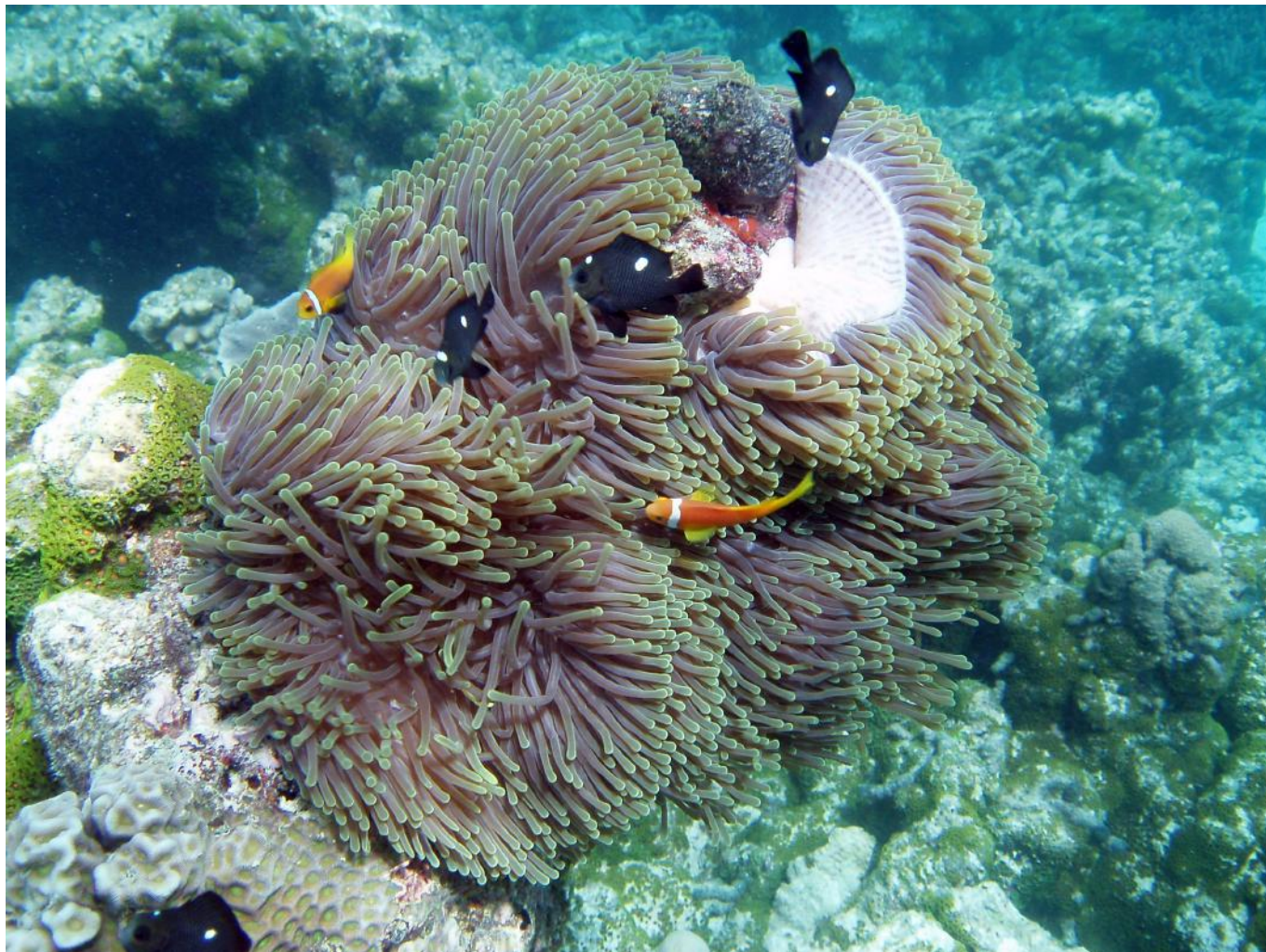


We are all looking forward to seeing you soon.  
Delphis Diving Centers in Royal Island.  
[www.delphisdiving.com](http://www.delphisdiving.com)



# ONE&ONLY REETHI RAH

## ACHIEVES NATIONAL GEOGRAPHIC DIVE CENTRE CERTIFICATION



One&Only Reethi Rah's Dive Centre was recently certified as the first and only National Geographic Dive Centre in the Maldives.

PADI National Geographic Dive Centres are PADI's elite dive centres with the highest of customer standards and product offerings. At One&Only Reethi Rah's Dive Centre, a team of professionals conduct classes for all levels in several languages. Digital cameras and camcorders are available to film the colourful Indian Ocean marine life.

All Reethi Rah instructors are now qualified as National Geographic Diving Instructors after completing the course from 20<sup>th</sup>-21<sup>st</sup> October 2007. The team was certified by PADI Regional Manager for Maldives, Thomas Sobota.

One&Only Reethi Rah is home to 130 of the most luxurious and spacious villas in the Indian Ocean, ranging from splendid beach villas with large verandas and direct ocean access to grand water villas featuring magnificent sunbathing platforms, ocean hammocks and extensive leisure areas.

Offering three spectacular restaurants with an unparalleled choice and sophistication of food, One&Only Reethi Rah also boasts extensive land and water sports and a full service Kids Only club. A superb One&Only spa by ESPA offers a fresh approach to healing in the Maldives, where personal journeys of wellbeing are tailor made for guests with the guidance of a wellbeing consultant.

One&Only Reethi Rah's Dive Centre is now also a PADI Gold Palm Resort Dive Centre.

Resort PR enquiries should be directed to:  
**ola@algeziry.com**  
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Created exclusively for the luxury resort market, One&Only Resorts are conceived as hallmarks of excellence. Set in some of the most beautiful locales in the world, each award-winning resort offers guests a distinctive style and personality borne of its local culture, a genuine hospitality and a lively energy that is unrivalled.

More information on One&Only is available at:  
**oneandonlyresorts.com**

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Ilse Van Steen: **+44 (0) 1753 899 837**

Email: **PR@oneandonlyresorts.com**

**“PADI NATIONAL  
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CENTRES ARE PADI'S ELITE  
DIVE CENTRES WITH THE  
HIGHEST OF CUSTOMER  
STANDARDS AND  
PRODUCT OFFERINGS.”**

Properties include One&Only Reethi Rah, Maldives; One&Only Le Saint G eran in Mauritius; One&Only Royal Mirage in Dubai; One&Only Ocean Club in The Bahamas and One&Only Palmilla in Los Cabos, Mexico. One&Only Cape Town, South Africa is currently under development and a further two One&Only Resorts are in the planning stages in Cacique, Costa Rica and at Muyuni Beach in Zanzibar.

# DJIBOUTI'S UNDERWATER WORLD

FEATURE **RITA BENTO** PHOTOGRAPHY **FRANCIS UY**



Red sponge (*Spirastrella cunctatrix*)

Where are we going? Ah Djibouti, yes... where is that? This was one of the many questions I had and one I kept hearing being asked. But, what I was really wondering was, what do they have underwater? What different species do they have? What kind of dive will we do?

Djibouti is a new country that gained its independence from Somalia in 1977. Since then it has been considered a secure place and the regular travel security to take whenever travelling somewhere new and foreign is required. With a total land area of 23,200sq km this country offers a coastline of 443km; a line mainly covered by extensive corals that you can spot while you are still seated in the Daallo aeroplane.

Despite the poverty, where the food supply from fish is only 2kg per person compared to the average number of 16kg per person in the world, this country gives an example of environmental awareness. Who would think that Djibouti has two marine protected areas (MPA) that are actually identified by the World Database of Protected Areas? This question might seem foolish, but it is a fact that most of the UAE MPA's aren't in the database, so Djibouti has my compliments.

We had the chance to dive inside one of the protected areas, Moucha Island in the

Tadjourah Gulf. This island was declared a Territorial Park on 20 September 1972, where it includes the subtidal and marine habitats of the island. Only the local fisheries are allowed in the park but only if the trips conducted last no more than one or two days. It is illegal to collect coral or molluscs inside the area. So now, you can imagine what sort of ecosystem there is, predominantly unmodified natural systems.

The minute you enter the water you feel the warm temperature on the surface of around 32°C, but be prepared to feel the thermocline as you dive and get closer to the bottom. There are different types of dives that you can do in Djiboutian waters; they vary from coral reefs and wrecks to amazing dives done in the company of whale-sharks.

## FISH

There are 455 different known species of fish in the region, but in some of the dive spots, like the coral reefs, you will only encounter the juvenile fish. In our first dive, along a coral reef, it was amazing to see the number of juvenile fish; it seemed we were entering an underwater Lilliputian world. The amount of small triggerfish, along with the normal small sized damselfish, made the longfin-butterfly fish (*Heniochus acuminatus*) look like a huge and intimidating creature. There were

gorgeous small whitetail dascyllus (*Dascyllus aruanus*) with their maximum sizes of 10 cm, the tiny domino (*Dascyllus trimaculatus*) and the two-band anemonefish, also known as the clownfish (*Amphiprion bicinctus*) around the large sea anemones. Of course this small world rapidly looked even smaller after the arrival of a great barracuda (*Sphyræna barracuda*) swimming carefully above the reef, followed by a loose school of doublespotted queenfish (*Scomberoides lysan*). Looking carefully beneath the coral colonies and inside the small caverns, we'd catch a glimpse of the shy but curious summan grouper (*Epinephelus summana*) with its beautiful pattern of large pale blotches and several small white spots.

To finalize a peaceful dive, there is nothing better than to see three oceanic whitetip sharks (*Carcharhinus longimanus*) – unfortunately a vulnerable species in the IUCN Red List. But maybe I was wrong... there is something better; a curious juvenile giant manta (*Manta birostris*), swimming around the divers while doing their safety stop. Now that's a great way to end a dive!

## CORALS

In all of the dives we made on coral reefs, the health and the different varieties of coral was very noticeable. According to GIS Database, a total of 325 species of corals have been

# DIVING DESTINATIONS

recorded in Djibouti. We were testimony to that, as in one small area we could see more than five varieties of coral genus.

Imagine you've never seen corals before and you question yourself about how many colours, textures and formations of corals exist. When you dive on a coral reef of the Tadjourah Gulf you have the idea that someone placed a demonstration pallet of corals just to answer that question. There aren't huge colonies of corals; instead there are small representations of different species of hard and soft corals.

After I jumped into the water, while we waited for some other divers, I immediately put my head in the water. To my surprise we were right above a healthy looking pale pinkish-brown *Acropora* table coral... what a nice start, I thought. During the dive we saw small colonies of the beautiful hemispherical and helmet-shaped *Porites* coral as well as the common cushion-shaped *Galaxea*. With their pale brown, greenish or pink colour the *Pocillopora* genus was also present together with columns of *Montipora*. My buddy, in all the dives, was Ally, our EDA videographer. She was trying to capture all that she could and that which she thought would be good on film. Suddenly she "calls" me, asking with her blue eyes "what is this?" It was a gorgeous pale-brown solitary *Ctenactis* coral among all the other corals and sponges.



Coral from the genus *Seriatopora*

## WRECK

The wreck dive gave us the opportunity to observe some of the pelagic species of the region. Above the wreck and around it, were yellowspotted trevally (*Carangoides fulvoguttatus*), coastal trevally (*Carangoides coeruleopinnatus*) and blue trevally (*Carangoides ferdau*). The wreck was covered with hard and soft corals, which allowed us to admire the normal reef associated fish species and several crown of thorns starfish (*Acanthaster planci*). There were several surgeon fish like the eyestripe-surgeonfish (*Acanthurus dussumieri*), whitebar-surgeonfish (*Acanthurus leucopa*) and wrasses, like the broomtail wrasse (*Cheilinus lunulatus*), moon wrasse (*Thalassoma lunare*) and also several parrotfish. In the shaded areas, schools of dory snapper (*Lutjanus fulviflamma*) gave some yellow colour to the hue areas.

Swimming carefully above the wreck, trying not to be spotted, there was a hawksbill sea-turtle (*Eretmochelys imbricata*). How happy we were to have that chance. I have to say that spotting a sea-turtle is quite common in Djibouti as well as it is in the UAE... but well, it was our first "Djiboutian sea turtle".

One of the amazing things on this wreck dive was the amount and size of black corals (*Antipathidae*) that we saw. What a beautiful view to see them all in healthy conditions surrounded by several damselfish. I wish I could have stayed longer, without moving, just to look at this vulnerable species which is disappearing from this world.

Unfortunately we were in Djibouti during the wrong season for the whale-sharks, but Luc, the owner of the the Blue Lagoon Dive Centre, said it's 99.9% guaranteed that you will see and dive with whale-sharks between September and November.

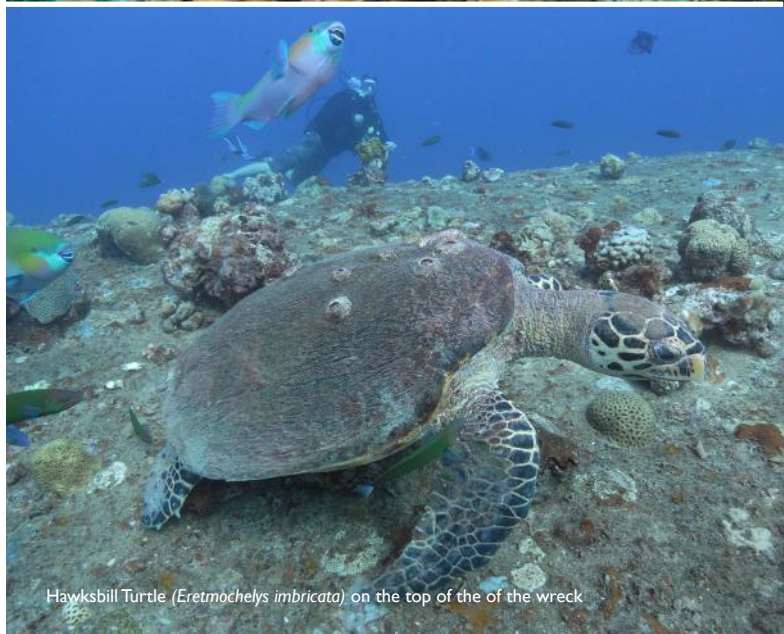
Our vision on getting back to Djibouti has just started to rise.



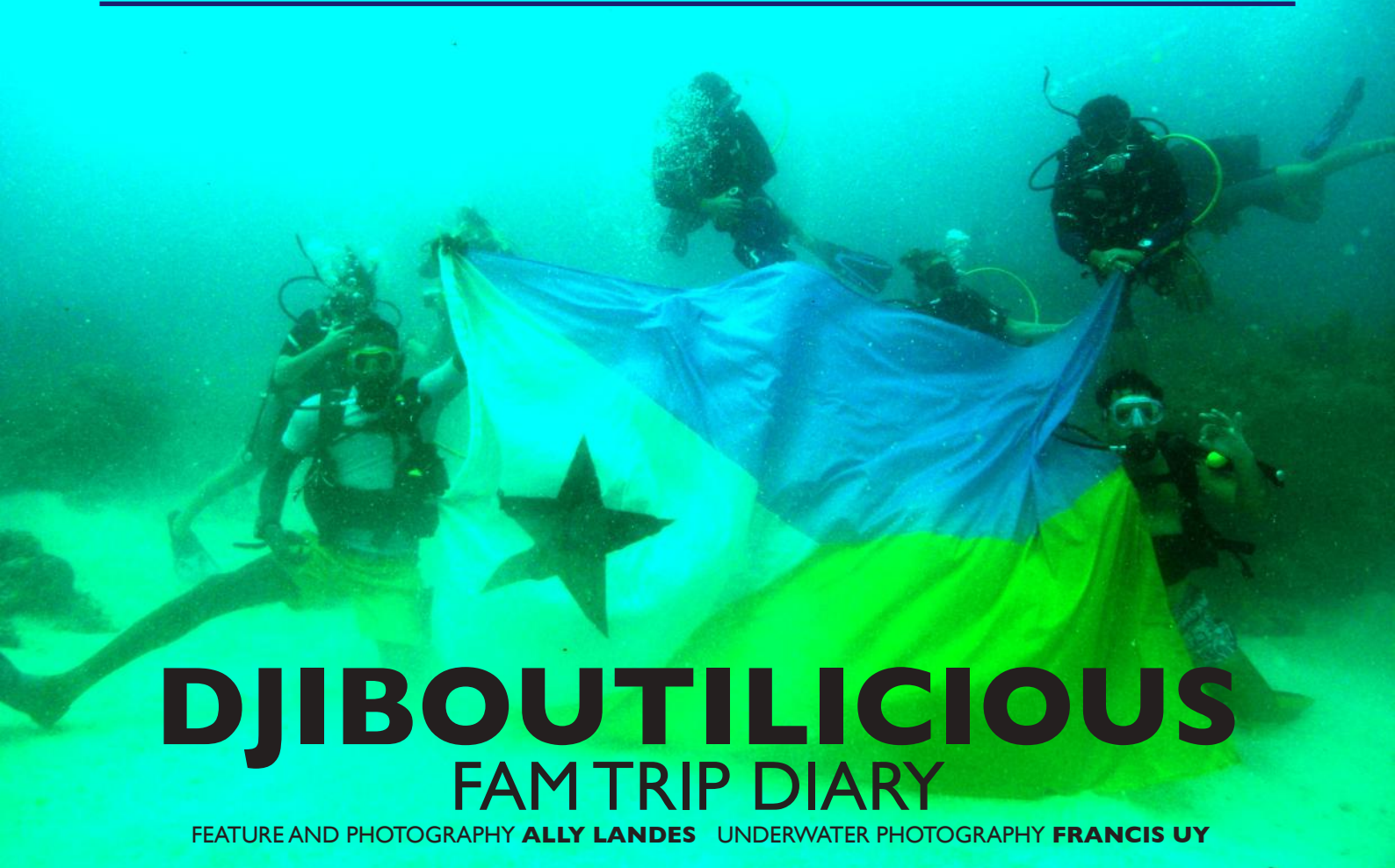
Table Coral from the genus *Acropora*



Ghardaqa Brittle Star (*Fromia ghardaqa*) it's a Red Sea endemic spotted in Djibouti



Hawksbill Turtle (*Eretmochelys imbricata*) on the top of the of the wreck



# DJIBOUTI LICIOUS FAM TRIP DIARY

FEATURE AND PHOTOGRAPHY **ALLY LANDES** UNDERWATER PHOTOGRAPHY **FRANCIS UY**

Now here is a little country that we knew very little about, let alone where exactly it was placed on the map. But to clear that all up for those of you with the same questions, Djibouti lies in the horn of Africa. It is bordered by Ethiopia in the west and south, and Somalia in the southeast. The remainder of the border is formed by the Red Sea and the Gulf of Aden and on the other side of the Red Sea, on the Arabian Peninsula, only 20 kilometres from the coast of Djibouti is Yemen. The capital of Djibouti is, quite simply, the city of Djibouti.

EDA received an official letter of invitation to do a FAM trip in Djibouti on the 26-30 May 2008 by the Djibouti Palace Kempinski Hotel and was flown over by Daallo Airlines to promote diving in this wonderful region that we knew so little or nothing about.

**26<sup>th</sup> MAY 2008**

**06:00 Arrival at Djibouti Airport**



We arrived nice and early in Djibouti and on exiting the plane it felt very much like having got on the plane in Dubai. Same temperature and climate.

We were greeted by two gentlemen who led us to the VIP lounge where we were welcomed by the Kempinski while our passports were stamped with our Djiboutian visas. Our luggage had already been collected and placed into a van and we were then led into the Kempinski bus and made a short journey through the outskirts of the city of Djibouti and taken into the centre where the Djibouti Palace Kempinski Hotel is situated on the edge of the water with a view of the Sea Port on the left hand side.

### **07:00-14:00 Free Time**

The hotel is a very large, grand, modern form of architecture also going under construction to expand to the growing demands of Djibouti's tourism market. Those of us living in Dubai are only too familiar with the sights and sounds of a construction site, that this particular one bared no difference. We never seem to escape this development of change.

The short bus journey to the hotel gave us a very small glimpse of Djibouti, but we would have a chance later to experience some sites and get to know more about the country later on.

In the mean time we had a lovely breakfast and time to freshen up and relax before the following days busy schedule was to begin.

### **14:00 Lunch at Lac Assal Restaurant**

The hotel restaurant/buffet boasts a large selection of starters and main courses of International cuisine and of course plenty of desserts for those with a sweet tooth. Beware though, you can get carried away.

### **15:30 - 18:00 Hotel and City Tour**

We received a grand tour of the hotel including the rooms in the new extension which are very nice. The bathrooms are lovely and you will never sleep in a bed as comfortable as the Kempinski beds! They are amazing and getting out of them in the morning, is a mission!

The city tour was great. This is where you really feel Djibouti. The colours, the smells, the people, the small shops and the poverty. Yes, there is a lot of poverty here, but these people are all smiles! The children will come to you asking for money as well as the adults, more so the women, but they show no sadness! It's quite amazing when you think that we have so much and yet we will always find something to complain about. These people have nothing, but seem content with life. If you start giving out money to one person though, you'll end up having to give to everyone. Just think about it as you will end up being followed for more.

# DIVING DESTINATIONS

You must be careful when taking photographs and make sure to ask first, as not everyone likes a camera pointed in their direction and you don't want to offend anyone. Some people may ask for money to have their photo taken. I strongly recommend taking a polaroid camera along on trips like this, so you can give a copy of the photograph over to them.

## 19:30 - 23:00 Cocktail, Dinner, Shisha

Once back at the hotel we went to go get changed to meet back in the lobby for some cocktails, followed by dinner in the Lac Assal Restaurant of the Hotel. We got to meet the rest of the Kempinski group and talk about our first day. We were also introduced to Luc Poirier from Le Lagon Bleu Diving Centre that we would dive with tomorrow and were able to ask our questions beforehand regarding all our equipment. That way we were well prepped with our cameras, video cameras, underwater housing and microphones for the day ahead and the team managed to get a schedule in for interviews for City 7 TV, Dubai Eye 103.8, The National Newspaper and Kempinski Lifestyle Magazine.

It was then time to turn in and get some sleep for the day ahead.

## 27<sup>th</sup> MAY 2008

### 07:00 - 08:00 Breakfast at Lac Assal Restaurant

### 08:00 - 18:00 Departure to Moucha Island, Le Lagon Bleu Diving Centre

We departed from the hotel toward the Sea Port to catch the dive boat to take us to Moucha Island where Lagon Bleu Village and the Blue Lagoon Centre is. It's a 20 minute speed boat journey and the island is fully equipped with traditional bungalows, with air-conditioning and bathrooms. If you want the island life for a few nights, this is the place to stay.



The island is lovely and relaxing and the food is superb. We were served typical Djiboutian cuisine and the fish melted in your mouth, it was so tender.

You can swim in calm sea waters off the front of the island and it's recommended to take your snorkeling stuff in with you as there are some large eels nestled in the rocks just along the edges.



# DIVING DESTINATIONS



Our morning dive on North Reef, was not the most exciting dive I've ever done, but if you can appreciate the different varieties of corals that we saw here, it is well worth it. Everything underwater here is so juvenile, but this shows how healthy life below the surface is. Rita Bento, EDA's Marine Biologist covers all the species we saw on all our dives in more thorough detail.

Our second dive was a wreck dive, The Fawn. The amount of healthy black coral growing on the wreck was amazing. It's so rare to see it. We got to see our first and only Djiboutian turtle as well as some much larger fish circling around the wreck. Visibility was about 12 meters and it was a nice way to end the days diving.

Some interviews were done while the rest of us packed away and we made our way back to the Kempinski to freshen up for a meal out not far from the hotel.

## 19:30 - 22:30 La Paillote Restaurant

La Paillote Restaurant is a very modern looking cafe and funnily enough is decorated with IKEA furniture and tableware. It has some very funky paintings of Marilyn Monroe, Audrey Hepburn etc with some added bling that adds some spice to the decor. There are also some metallic sculptures of marine life also scattered around and the ambience in this restaurant is awesome. Definitely worth a visit for a meal out.

28<sup>th</sup> MAY 2008

07:00 - 80:00 Breakfast at Lac Assal Restaurant

08:00 - 18:00 Departure to Moucha Island, Le Lagon Bleu Diving Centre

We again return to Moucha Island to do our other two dives of the day and they were great. Again the visibility varies between 7 -

12 metres, but it's completely different diving from the UAE and that's what it's all about. The first dive was Les Patates Air France and the second dive was La Bouée Coulée with Titan Trigger Fish (*Ballistoides Viridescens*). This was very exciting and they are feisty fish. A lot bigger than what we are used to in the UAE.

In-between the two dives, the locals on Moucha Island prepared a surprise for us before lunch. We were given a show of traditional Djiboutian Dances. It was fantastic and you really got a feel for the culture. We were unaware of the special event until we heard some singing coming from behind the bar area where we were sat waiting to be called for lunch. It was great fun and a fantastic photo and film opportunity. They put so much feeling into their singing and dancing, that you can't help smile and tap your feet to the beat. This was definitely a highlight.



20:00 - 22:30 Dinner at Lac Assal Restaurant and then a visit of Djibouti's nightlife scene

Everyone recounted the events of the day over dinner and you could sense everyone had begun to relax and completely become a part of Djibouti's laid back life. Going back to Dubai was going to be hard after having been treated to so many new experiences.

After dinner, it was suggested to go into town and check out one of the nightclubs to see the



Photo by Bahr Karim



The Faon, wreck dive

# DIVING DESTINATIONS

difference between Dubai. Yes, it's definitely very different. Djibouti has many American Marines and the French Legion around so it can be quite intimidating as to why these men in uniform are all over the place. But Djibouti is a very safe place and you do not feel threatened taking a taxi as long as you ask how much you should pay at the hotel to get to a certain destination, if not, like any other foreign place, they will try to get more money out of you and you wouldn't know any better.

## 29<sup>th</sup> MAY 2008

**07:00 - 08:00 Breakfast at Lac Assal Restaurant**

**08:00 - 18:30 Excursion to Lac Assal – Lowest Point of Africa**

We were all very much looking forward to this day trip. This was a two hour car journey and we took off in convoy in 4x4's and reached our first stop at a 750m deep fault that is widening by 2cm a year. Little vendors sell gifts made from the natural resources of the land all along the route of sites.



Our next stop was at the hot springs of Lac Assal. These were truly a phenomenon of nature. The heat in this area was so strong, it made a few people feel very uncomfortable. Make sure to bring lots of drinking water. The spring on the left was about 60°C and the one on the right, 80°C! Not a pool you want to fall into.



We then saw Lac Assal and the landscape

there is surreal. This is supposed to be saltier than the Dead Sea and we were supposed to have had a go at getting in, but our tour guide seemed to have forgotten and when we realized that was the place, it was too late and we had already moved on. Make sure you tell the guide you want a swim. They bring fresh water for you to have a rinse when you get out.

There are families living by this salty mass of water, selling souvenirs of crystals and sheep skulls that they have immersed in the waters salt, creating very different skull ornaments. Take care bringing these skulls back as the salt on them can get damaged if you do not pack them properly.

And our last stop brings us to Djibouti's youngest volcano that is the most recent to have erupted. The land is so barren and we were told that it had not rained for 2 years. With that in mind, you can imagine how fertile the soil is around the volcano and what a difference a little rain would make.

We then made a stop to have lunch and on route back to the Kempinski the 4x4's all made a stop by the side of the road. To our surprise we all looked out the side of the car and realized the ground had begun to move. On looking more closely we realized that they were baboons. They are so hard to see at first as they are camouflaged with the rocks and dirt. Our tour guide was throwing out bread for them and so I got out of the car to try and film them, but hastily got told to get back in the car by our group in the other car in case I got attacked by one. I hadn't thought of that, and yes these wild animals are incredibly strong and unpredictable. These baboons live right next door to a small family's home territory. We wondered how man and monkey got along in such close proximity.

There is so much wildlife in Djibouti, make sure to keep your eyes open.

## 17:30 - 22:30 Dinner at the Ethiopian Restaurant

Yet another treat to definitely go and try. This Ethiopian restaurant is a gem. We were sat on low stools in front of high table baskets to share with six. In this basket they serve about 5 different portions of traditional Ethiopian dishes to each person and they were so good that we couldn't stop eating even though we'd reached our stomach limits. And the great thing here is you get to tuck in with your hands. True Ethiopian style. You accompany the food with two very light, fluffy types of pancake. Your hands are washed beforehand over a basin that is brought around to each individual and fresh water is poured over them and you scrub away.

While you enjoy your dinner, a live dancing show is performed by an Ethiopian couple in traditional dress. They go through all the

different styles of outfits that are worn to all the special events in Ethiopia for that particular tribe.

If you're not one for the limelight, you're best warned that they do come and try to get you to come up and dance with them. It's an excellent evening that must be tried.

There are other things on the menu, but we were recommended our dish and we were very glad they did.

## 23:00 Visit to Pasha Casino and Kempinski Safari Club

One last stop in the Kempinski hotel to end our last night in Djibouti.

Believe it or not, Djibouti have Casino's and the newest and most recent one is situated inside the Kempinski hotel attached to the Safari Nightclub.

Rita and I had a go with our chances on the slot machines, but didn't amount to much while some of the other members got lucky on roulette. You definitely need to know the games though before attempting to play as the casino is packed.

We ended the night with a bit of a boogie in the Safari Club and then all made our way back to our amazing beds calling us for one last sleep! I miss that bed and might invest in my own Kempinski special!

## 30<sup>th</sup> MAY 2008

**10:00 Breakfast at Lac Assal Restaurant**

**11:00 Review trip in Djibouti with Kempinski**

**14:00 Lunch at Lac Assal Restaurant with Thank you's**

**14:00 Check out of Hotel**

**17:45 Flight back to Dubai**

Thank you to the Djibouti Palace Kempinski Hotel, Daallo Airlines and The Blue Lagoon Centre for a memorable trip and for the amazing service that was used in looking after us. We are already looking at going back to Djibouti to catch the migrating whalesharks from mid-September until the end of November. We were given a 99.9% chance of seeing these large pelagic creatures, this is one opportunity not to miss!

## CONTACTS:



[www.kempinski-djibouti.com](http://www.kempinski-djibouti.com)



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



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

# UNVEILING DJIBOUTI

FEATURE **AMANDA TOMLINSON**  
 PHOTOGRAPHY **ALLY LANDES** UNDERWATER PHOTOGRAPHY **FRANCIS UY**



I've been known to tell a few stories or two, so when I returned from five days in Djibouti, on the Horn of Africa, I was armed with a few tales of adventure, triumph and exploration. As a journalist, my purpose for being there, after all, was to gather tales and that's exactly what I set out to do. Here are some of the stories I told on my return from Djibouti.

## PIRANHAS EAT YOUR HEART OUT

I'm not the most experienced scuba diver in the world. Far from it, in fact. I'd never heard of trigger fish and they didn't sound 'that' bad to me. Actually, I thought that because our instructor, Luc, failed to mention them until the end of our safety briefing – and even then it seemed to be an afterthought – there must

be nothing to fear. Even when my fellow divers discussed trigger fish tales, I still didn't think anything of it. Not even a story of a dive buddy having half his ear bitten off by an enraged trigger fish could rattle my nerves.

Off we went – two local guides, another diver and me. I merrily followed, checking out the

# DIVING DESTINATIONS

scenery. I'd almost forgotten about trigger fish until Abbas, the guide in front of me, stopped in his tracks and furiously back-paddled, arms and legs splashing furiously. Needless to say, that had me shaking in my fins and I followed suit. It wasn't until a few seconds later the creature that had Abbas so startled revealed itself – and what a cranky thing it was. About a foot in length and baring Colgate-strong teeth (that's how I remember it anyway – I'm sure it was flashing those choppers at me), it charged. I was certain it wanted my ear for morning tea. Like I said, I'm not the most experienced diver and situations like this have a tendency to put a dent in my confidence. I wanted out, but Abbas was having none of that sooky behaviour on his watch. Like troupers, we snaked our way through what seemed like a never-ending army of trigger fish to friendly grounds and continued our dive.

Once back on the boat, everyone had similar tales of trigger fish battles and I was pleased to discover I wasn't the only one who felt somewhat scared.

## OUT OF AFRICA

While the diving was brilliant and most certainly a highlight, it would be crazy to go all the way to Djibouti and not experience what's on dry land. Here are a couple of recommendations:



## TO MARKET, TO MARKET

To get a feel for Djibouti and experience some of the local culture, get yourself down to the markets. You'll quickly find yourself submerged in the practice of bargaining, whether it's for locally made beaded jewellery or hand-carved wooden artifacts. The stallholders are friendly and engaging, and even if you don't speak French or Arabic (the two official languages of Djibouti) they will still try to hold conversation and encourage you to shop in their stall. It's a great opportunity to buy souvenirs and presents for the folks back home, while also supporting the local economy.



Lac Assal 150 metres below sea level, the lowest point in Africa

## INLAND ADVENTURE

After your adventures under the sea, check out something else below sea level, but this time on dry land. Lac Assal is 150 metres below sea level and is the lowest point in Africa. The lake is apparently saltier than the Dead Sea and those in the know advise taking extra water for a quick rinse if you're planning on floating in its waters.

Beside the lake you'll find a hot spring where the water temperature reaches 80°C – don't swim here!

One of the most spectacular sights along the way to Lac Assal is a 750 metre-deep open-air rift, where the Horn of Africa is pulling away from the continent. The fault is widening at a rate of 2cm per year and some say that within 100 years it will be an archipelago. It's evidence of the seismic activity going on under the earth's surface. The area experiences between 30 and 50 micro-earthquakes a day, but none are strong enough to be felt.

If you're lucky in your travels, you'll also see some of the local wildlife. Keep your eyes peeled for gazelles and baboons with big red bottoms.



Photo by Francis Uy

## SHAKE DJIBOUTI

**Getting there:** Daallo Airlines flies to Djibouti from Dubai. It takes about three hours.

**[www.daallo.com](http://www.daallo.com)**



The fault. Photo by Francis Uy

**Visa:** Visitors will need a visa, but these can be arranged at the airport on arrival for about US\$20

**When to visit:** From October to January, Djibouti hosts migratory whale sharks so it's an ideal time to visit. What's better is that the temperature is cooler too.



**Where to stay:** As Djibouti is relatively untouched by tourism, accommodation options are limited. The five-star Djibouti Palace Kempinski has everything you would expect from a hotel of its standard and it has the most comfortable beds around. Let's hope the comfy beds don't stop you from venturing outside your room.

**[www.kempinski-djibouti.com](http://www.kempinski-djibouti.com)**

To be close to the diving action, Le Lagon Bleu on Moucha Island is the place to stay. What its beach hut accommodation lacks in five-star luxury, it certainly makes up for in character and you can't beat the location. Le Lagon Bleu also operates a dive centre.

**[www.atta-dj.com](http://www.atta-dj.com)**

# AN AQUATIC TASTE OF DJIBOUTI

FEATURE **VESELA TODOROVA** PHOTOGRAPHY **FRANCIS UY**  
A VERSION OF THIS ARTICLE WILL RUN IN THE NATIONAL



We are fifteen metres under water and I am panicking.

I was expecting that diving off the azure coast of the small African country of Djibouti will leave me breathless with excitement. But I was wrong. I am finning along a tropical reef, wandering where that feeling of wonder is.

The morning had surely started off promising. Getting from our hotel, Djibouti Palace Kempinski, to the diving base on the island of Moucha meant 40 scenic minutes of the most beautiful turquoise colour I have seen in a long time. It is the hue of water that is clean, fresh and full of marine life and it becomes even more beautiful against the backdrop of the island's white sandy beaches and tall mangroves.

Besides the right setting, we seem to have the right people as well. Our dive centre, affiliated with Le Lagon Bleu, a small but picturesque resort on the island, is the first operation of its kind in the whole country. The staff and their other clients for the day – two muscular servicemen from the French Legion – looked very serious about their diving. All nine of us are enthusiastic divers and members of the Emirates Diving Association. We have a marine biologist and two dive instructors. So how would you blame me if I told you I expected a dive on par with all the National Geographic underwater footage I have been enjoying ever since I was a child.

But it has been 15 minutes underwater already and the only reason why I feel short of breath has to do with the extra one kilo of weight I decided to take with me on this dive. I am having to fin hard to compensate, but it is a pleasant enough dive. The coral reef we are gliding over is very healthy. There are plenty of young fish, especially small triggerfish swimming around us.

The friendly dive centre staff and all the tourism officials who have identified the country's marine environment as an important potential pull for tourists have been fantastic, and what follows in the next two days is enough to persuade me that Djibouti is well worth the visit.



That feeling of profound wonder, which like anything, becomes harder to feel with the more you see, comes on our second dive. That dive, over a huge ship wreck, was described by one diver as one of the best wreck dives they have ever done to date.

The ship wreck is teeming with marine life. The reef creatures are so many and so diverse that it is difficult to decide which way to look. A turtle, about a metre in size, swims below us.



Photo by Ally Landes

# DIVING DESTINATIONS



On top of the wreck there is a variety of grazing fish with large well-fed parrot fish in green, blue and red, viewing for attention with several varieties of butterfly fish. A look up shows several thin long barracudas swimming away in the blue distance. A close-up inspection of the ship's walls is also rewarding – nudibranches have made homes on the vessel's sides.

The following day matches in terms of excitement. Djibouti's waters are home to several species of sharks. Unfortunately, the great creatures are declining in numbers because of overfishing. Local fishermen can get up to US\$800 for a shark in Yemen, just across the water on the other side of the Red Sea. The small fortune is paid by Japanese traders who export the meat to their country, explains Luc Poirier, the dive centre manager.

"Ten years ago we had plenty of sharks," he said. "Now the numbers are decreasing because of overfishing... The government are trying to do something but it is difficult."

And while the future of these great creatures in the Djiboutian waters does look alarming, we were lucky to see not one but three young sharks at the end of our third dive. We were at a place known as the North Reef – only 25 minutes by speedboat from the dive centre. It was a cliff wall as deep as 40 metres. We only went a little deeper than 20 metres, where I saw some of the largest fish in my diving experience. It is hard to judge the size of things underwater, but the two big, fat groupers and my first ever Napoleon wrasse, seemed enormous. And as if that was not enough, another great surprise appeared just as we were getting ready to finish and do our safety stop.

I was relaxing and contemplating my return to the surface and to have lunch when out of the blue, the silver form of a manta ray

appeared. The ray was gliding parallel to my dive buddy, then quickly overtook him and started circling around us. It swam round and round in close proximity, giving us a chance to see the scratches on its back, one of us figured it could be shark bites. Although it was only a baby, it was already impressive in size with its oval-shaped, flat body already larger than a metre in diameter.

But I was later to learn that while manta rays can be friendly, trigger fish are not. We had just been warned to avoid them and especially their large strong front teeth when one of the bold creatures went after Mr Poirier. He fought off the attack but the experience made me feel a tingle every time we saw a triggerfish.

Ask any well-travelled diver about their best underwater experience and you will hear the names of famous locations such as the Maldives, Australia or Egypt. Djibouti might not be such an obvious choice but it does have a lot to offer.

"The visibility is not always very good but there are a lot of different species and whale sharks," said Mr Poirier, summarising the small country's appeal.

Whale shark season is between October and January and the dive centre organises trips to Ahta, approximately 45 minutes away by boat from Mousha Island, where whale sharks can be seen.

"There is a 90 per cent chance you will see a whale shark," said Mr Poirier.

The experience is also accessible for snorkelers as the magnificent creatures swim close to the surface.

And since diving can sometimes be an unpredictable sport, there is plenty to do in

Djibouti if visibility is bad or the sea is choppy. A visit to Lac la salle, a lake that is saltier than the Dead Sea is definitely worth it despite the heat that can make any hardened Dubai resident cry. Apparently, swimming in the lake is an amazing experience but our guide, who arranged that fresh water is brought for us to rinse off immediately after the dip in the lake, forgot we had wanted to swim. Anyway, the water was used for a better purpose, being given to villagers in the hot and dry mountain area. The Djiboutian countryside is teeming with wildlife and we saw gazelles and a group of Hamadryas Baboons on our way back from the lake.

Djibouti is good for shopping as well and you can find great cotton and jewellery there. There are also a couple of shops who offer authentic Djiboutian crafts. With the beaded purses being so pretty I regret not packing another ten. Although it is good to bargain in the market, do not bargain too hard with the two shops which are supplied by female artesans living in the Djiboutian countryside.

All in all, Djibouti is not only enjoyable to visit but will likely make you want to come back.



# NABUCCO ISLAND RESORT – INDONESIA

FEATURE AND PHOTOGRAPHY **EXTRA DIVERS DIVE CENTRE**



Off the coast of Borneo, far from civilization, exists one of the last divers' paradise: Nabucco.

Nabucco is a small island close to Maratua with only 13 rooms spread out in 6 double bungalows along the beach. Not a single palm tree was moved to place the traditional huts. The resort is embedded in the island's landscape of untouched flora and fauna.

The island shows the perfect co-existence of luxury and ecological thinking; the sewage is disposed of in an environmentally friendly way, fresh water comes directly from the island and warm water is obtained by solar energy. The island is home to numerous different species of birds, the rare coconut crab, flying foxes and many more other species.



The rare Coconut Crab

## THE RESORT

All the rooms have a private bathroom with hot and cold water, air-conditioning, ceiling fans and a sea view from the balcony. The bungalows are but a few steps from the beach and are all built in traditional Indonesian style. The room furnishings made from natural materials complete the natural exclusivity.

The resort has an open air restaurant with a stunning view, a cosy sunset bar, a TV room, and a small boutique.

## FOOD & SERVICE

The management is doing its best to make every guests stay an extraordinary and unforgettable holiday. Guests will get culinary delights with Asian as well as Indo-Pacific specialties, prepared from fresh ingredients such as fish, meat, vegetables and fruits. The morning starts with a rich breakfast and self-baked bread, typical light Asian dishes are offered for lunch and a fantastic menu is prepared for dinner. Vegetarian dishes are also available. To round up a perfect day, divers can relax with a glass of wine or a light fruity cocktail.

## ACTIVITIES

Diving, snorkelling, beach volleyball, kayaking and land excursions are available and an Asian massage can be booked at the reception.

## EXTRA DIVERS DIVE CENTRE

Extra Divers on Nabucco Island is a modern base with reception, drying and store room and is equipped with the latest Aqualung equipment. The well-experienced guides will take you on some unforgettable diving adventures. The best spots to dive are almost directly in front of the bungalows. Divers' dreams become a reality when they see swarms of eagle rays, hammerhead sharks, tunas, turtles and many other marine species.

Macro-photographers will also find the places around Nabucco Island great for shooting other subjects. Sangalakki, where manta rays can be seen daily, is just a 50 minute boat ride away and at Kakabhan and Maratua, guests can admire the flora and fauna of the very rare fresh water lakes. The dive sites

around Nabucco Island are some of the best worldwide – there is a reason the natives call it "Big fish country".

Diving is all year round. Air temperatures range from 27°C to 32°C and water temperatures vary between 25°C and 29°C.

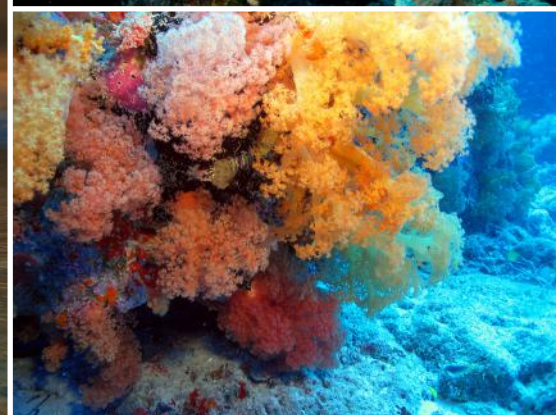
The dive centre is equipped with 40 12-litre tanks. All aluminium tanks are fitted with DIN valves. Adapters are available for divers with INT fittings on their regulators. The new rental equipment is well maintained and wetsuits and BCD's exist in all sizes. The dive centre has a mobile oxygen unit to be taken to the dive sites and one stationary unit.

Extra Divers instructors teach to PADI and SSI standards from beginner up to divemaster level.

To make bookings, please email us at: [nabucco@extradivers.info](mailto:nabucco@extradivers.info)



# DIVING DESTINATIONS



# SMOKING & DIVING

## A RISK FACTOR FOR DECOMPRESSION ILLNESS?

FEATURE M.D. DAVID BUCH

Most scuba divers know that consuming alcoholic beverages prior to diving could cause dehydration. This in turn can increase the risk for decompression illness (DCI), also known as "the bends" or "caisson disease." During basic open-water training, divers are commonly taught to avoid alcohol until after the day's diving is complete, and even to consider avoiding alcohol until the entire dive vacation is over. Even when diving in economically developing countries, many dive operations will not serve alcohol to divers until after the dive. But what about tobacco?

Smoking seems to be much less taboo among divers. I have observed divemasters and other experienced divers smoke cigarettes just before diving, during the surface interval, and after completing the dive series. Most smokers are likely aware of the health implications of consuming tobacco but choose to smoke despite the risks. However, divers who smoke are likely not aware of its possible effect on DCI.

### Does Smoking Increase the Risk of DCI?

A review of the medical literature as it pertains to scuba diving and tobacco use provides very little information on whether smoking increases the risk of DCI. There is reason to believe that medical conditions caused by cigarettes (e.g., emphysema or atherosclerosis, a narrowing of the blood vessels by hard plaque and cholesterol deposits) could predispose a diver to a serious dive injury such as arterial gas embolism or decompression sickness, the two forms of DCI. Some of these smoking-related diseases can be present without the diver's knowledge. It is conceivable, then, that seemingly healthy smokers might be at greater risk for DCI.

An internet search using two popular search engines (Google and Yahoo) returns some information, but consists largely of opinion articles that typically recommend against smoking and diving for the reasons cited above. Until recently, there have been no studies specifically addressing the possible relationship between cigarette smoking and DCI.

### The Smoking & Diving Study

Data collected by Divers Alert Network (DAN) on divers with DCI include information on the severity of divers' symptoms and their smoking history. Between the years 1989 and 1999, more than 4,000 records of DCI were obtained. These records were carefully reviewed and analyzed by researchers at Duke University and DAN. The conclusions, which have been recently published in the



December 2003 edition of *Aviation, Space and Environmental Medicine* (volume 74, page 1271), suggest that smoking cigarettes, independent of other risk factors, may cause divers with DCI to manifest more severe symptoms than non-smokers.

DCI encompasses a range of symptom severity, from mild itching and / or joint pain to convulsions, unconsciousness and death. The above-mentioned study, entitled "Cigarette Smoking and Decompression Illness Severity: A Retrospective Study in Recreational Divers," revealed that heavy smokers (more than 15 pack-years) tended to develop more severe symptoms of DCI than lighter smokers, who in turn had more severe symptoms than nonsmokers. A pack-year is defined as smoking a pack of cigarettes per day for a year.

### Heavy Smokers See A Difference

When heavy smokers (i.e., divers who smoked a lot, not overweight smokers) were compared to nonsmokers, the heavy smokers who manifested DCI were almost twice as likely to have more severe symptoms than mild symptoms. Approximately 37 percent of injured heavy smokers showed severe symptoms, whereas only about 24 percent of nonsmokers manifested severe symptoms. About 20 percent of the injured nonsmokers showed only mild symptoms of DCI, while 14 percent of heavy smokers presented with mild symptoms.

This study did not prove that smoking predisposed divers to DCI. It did show, however, that if a diver develops DCI, the severity tends to be greater in smokers. Smoking could be a direct cause of this, perhaps by way of changes in blood vessels or the lungs.

### Smoking Associated With Other Risks?

While statistical methods were used to adjust for almost all conceivable risk factors for DCI,

an alternative explanation is that smoking may be linked to some other risk factor. Further research and data are needed to confirm the theory that divers who smoke cigarettes have an increased risk of DCI. To obtain this information, one would need to know the percentage of both smokers and nonsmokers who develop DCI, information that is not yet available. Divers may be willing to accept the long-term risks of smoking on their overall health. Perhaps the risks of cancer, lung disease or heart disease seem so remote that smokers assume that they will quit eventually before developing these diseases. With regard to diving, the notion that smoking cigarettes may be associated with more severe DCI symptoms could provide yet another reason not to smoke.

### About the Author

Dr. David Buch is currently a PADI certified rescue-level diver. He began diving 12 years ago and has subsequently completed medical school at Virginia Commonwealth University's Medical College of Virginia in Richmond, Va. During his final year of medical school he completed a research elective at Duke University in Durham, N.C., home of DAN. At this facility he examined data from thousands of scuba divers with decompression illness. This research led to a publication in *Aviation, Space and Environmental Medicine*. After medical school, Dr. Buch spent three years in Cincinnati, Ohio completing his residency in internal medicine. He has since worked for the Veterans Hospital in Cincinnati and currently has a hospital-based practice in Los Angeles.

*Courtesy DAN Europe*



# WHY CIGARETTE SMOKING AND DIVING DON'T MIX

FEATURE JIM CARUSO, M.D.

As pointed out by Dr. Buch, far too many divers smoke, but I would not characterize it as a majority. In fact, during the 15 years I have been involved in recreational diving, I have seen a decrease in tobacco use among divers. Many dive boats have restrictions on smoking while onboard.

However, it is still not uncommon to see divers smoke before the dive, after the dive, and even during the surface interval. I have known many dive instructors who were addicted to cigarettes.

In my "day job" as a forensic pathologist, I am constantly reminded of the negative impact cigarette smoking has on an individual's health. Smokers' lungs have a distinct appearance and consistency: some of these lungs are in such a condition that I am actually amazed that they are able to exchange gas at all. Additionally, the contribution of cigarette smoking to development of atherosclerosis (narrowing of the blood vessels by hard plaque and cholesterol deposits) of the peripheral and coronary arteries is significant.

Despite the recent publicity in both medical journals and the lay press emphasizing the contribution obesity is making to premature death, cigarette smoking is the number-one cause of preventable disease and early death in the United States. An article in the March 10, 2004, issue of the *Journal of the American Medical Association* reported that 18.1 percent (435,000) of deaths that occurred in the United States in the year 2000 were related to tobacco. Poor diet and physical inactivity

were responsible for 16.6 percent (400,000) of deaths. In contrast, microbial agents such as influenza and pneumonia resulted in 75,000 deaths and motor vehicle-related deaths numbered 43,000.\*

## WHY SMOKING IS NOT RECOMMENDED

### CARBON MONOXIDE

From a medical viewpoint, it's difficult to imagine why anyone engaging in an activity like scuba diving, where efficient gas exchange and proper oxygenation of tissue play such an integral role, would smoke. Smoking can and does interfere with this exchange.

Cigarette smoke contains a number of toxic substances that are harmful to the body, including carbon monoxide (CO). CO is produced by incomplete combustion of any organic substance and interferes with the ability of the red blood cells to carry oxygen to body tissues.

All diving revolves around effective gas exchange, and anything that interferes with this process places unnecessary risk on the diver. If carbon monoxide is bound to your red blood cells, your blood's ability to carry oxygen is compromised. While a nonsmoker typically has a carbon monoxide level (reported as a measurement of carboxy-hemoglobin) of under 2 percent, levels as high as 10 percent can be seen in smokers, particularly in heavy (frequent) smokers.

### LUNG IRRITATION

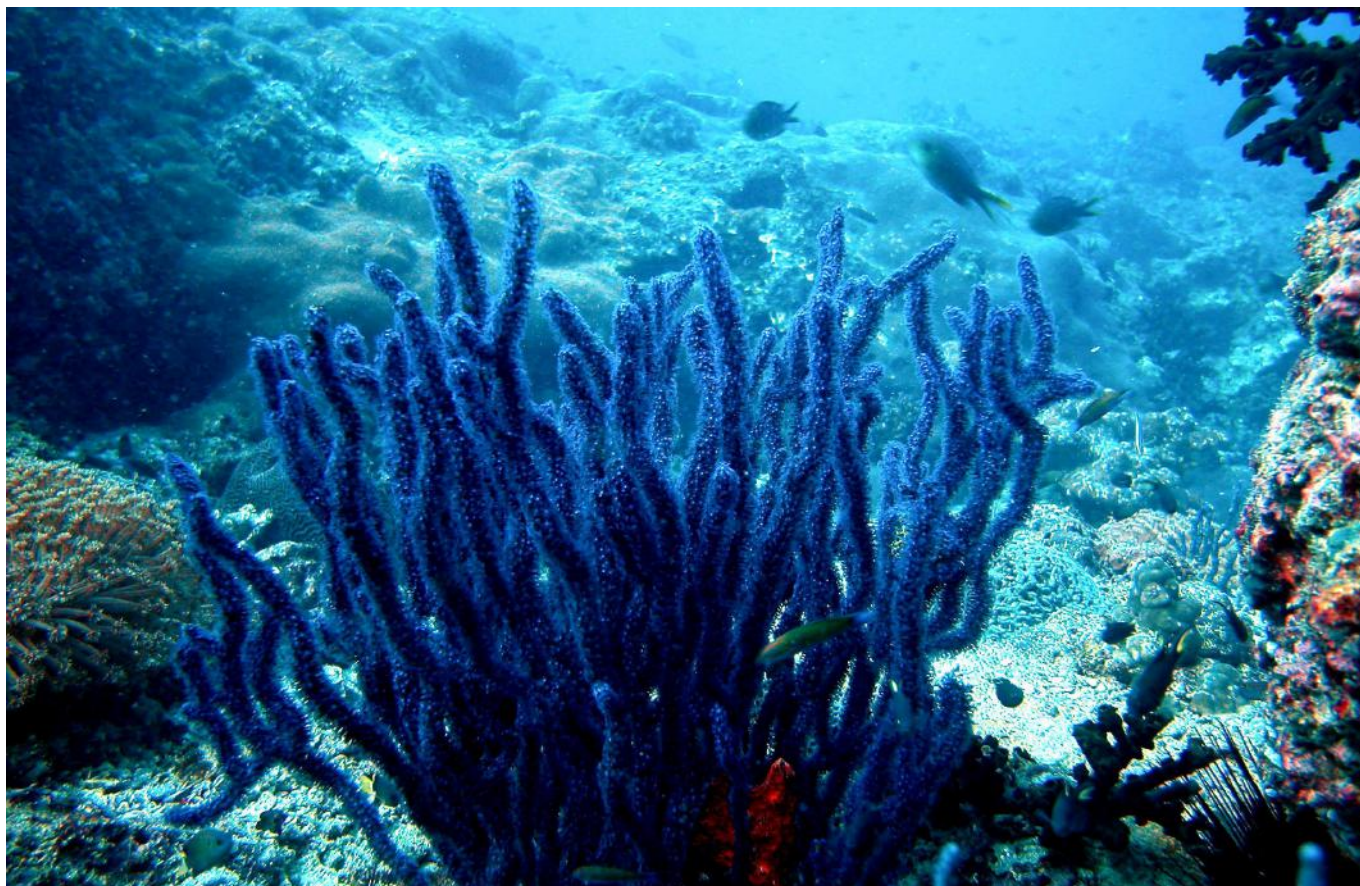
The toxins in cigarette smoke irritate the lining of the respiratory tract. One important type of cell on the mucosal surface of the airway contains cilia that propel mucus and foreign material up and out of the respiratory tract. Cigarette smoke harms these cells, impairing the body's ability to clear foreign material from the airway. This contributes greatly to the development of chronic bronchitis; it is also the main reason for "smoker's cough" and the fact that long-term smokers bring up abundant secretions after sleeping.

Irritation of the airways may also predispose the smoking diver to episodes of acute bronchospasm. A diver experiencing this phenomenon would have an increased risk for pulmonary barotrauma and gas embolism.

### EMPHYSEMA

Except for a small number of individuals with rare genetic disorders, emphysema is almost nonexistent in nonsmokers. The lungs are made up of tiny air sacs called alveoli. Each of these air sacs is lined by cells that facilitate the transfer of oxygen to capillaries that are intimately associated with the alveoli.

The alveoli maintain their structure as air sacs through seven or more decades of use in nonsmokers. In smokers, however, the toxins contained in cigarette smoke damage the connective tissue skeleton that keeps the alveoli intact. Emphysema destroys the walls of the alveoli, reducing the ability of the lungs to exchange gas: the alveoli no longer have the ability to fill and empty properly.



In fact, destruction of the walls creates larger airspaces with thin walls that may balloon out from the lung surface. These are known as bullae and may place a diver at risk for pulmonary barotrauma and arterial gas embolism. Under the microscope, the walls of the alveoli in a smoker's lung are fragmented; when this occurs, the normal histology (tissue structure) of the lung is lost.

Emphysema is a chronic disease that is incurable, although medications such as asthma inhalers and steroids can help relieve symptoms. Oxygen therapy often is necessary at some point. For very advanced stages of emphysema, lung transplantation may be recommended.

### NICOTINE

Nicotine is a drug that is introduced into the body with cigarette smoking and other types of tobacco use, including chewing tobacco and snuff (pulverized tobacco that is either dissolved in the mouth or sniffed through the nose – hence its name).

Nicotine temporarily causes blood vessels to constrict, elevates blood pressure, and with chronic use contributes to the development of atherosclerosis. A disease such as atherosclerosis can eventually lead to problems in getting the necessary amount of blood, and therefore oxygen, to the tissues.

If the blood vessels in the neck or those at the base of the brain are involved, the end result can be a stroke. If the arteries on the surface of the heart become diseased, the smoker may

have a heart attack. Sudden cardiac death is a common initial sign of coronary artery disease. Suffering a stroke or heart attack during a dive will usually have a catastrophic outcome. Even if the diver makes it back to the boat or to shore, the availability of high-level medical care is often severely limited.

### LUNG CANCER

The most serious consequence of long-term heavy cigarette smoking is the increased risk of lung cancer. The most common types of lung cancer are relatively uncommon in nonsmokers. The link between tobacco use and the development of lung cancer is generally accepted, even by most smokers. The dangers of smoking have been stated as a warning from the U.S. Surgeon General on all cigarette packages and advertising since Congress passed the Comprehensive Smoking Education Act of 1984. Tobacco abuse is not only linked to cancer of the lung, throat, and oral cavity, but to many other organs in the body.

Cancer is the result of cells losing some of their normal growth properties and self-regulating mechanisms. Cigarette smoke contains many toxic substances that have carcinogenic (cancer-causing) properties. As we already mentioned, the toxins in cigarette smoke cause changes in the cells lining the airway. Chronic irritation results in a change from the cilia-covered and mucus-secreting cells to a cell type that is more resistant to the effects of these toxins. Normal cells have regulating mechanisms that control growth as well as how cells interact with neighboring cells.

Youth is a stage of life where many individuals feel indestructible. Unfortunately, I also see the end result of that mindset in my medical practice: high-risk behavior is the norm in many young persons.

The consequences of self-destructive behavior are too far in the future to be of any concern to them. Most young smokers have enough cardiorespiratory reserve to overcome any impairment in gas exchange that smoking may cause. The older smoker will not have this luxury, and at some point cessation of smoking will not result in complete reversal of the pathology (deviations from normal, i.e., the impaired ability to deliver oxygen to tissue) tobacco abuse has caused.

In the accompanying article, Dr. Buch highlights the DAN study that indicated there might be a link between heavy cigarette smoking and the development of serious symptoms after a decompression accident. If a diver did not already have enough reasons to be a nonsmoker, this should help tip the scale.

### ABOUT THE AUTHOR

In addition to being a DAN consulting physician, Jim Caruso is a pathologist, Diving Medical Officer, and Flight Surgeon for the United States Navy. The opinions expressed here are his own and may not necessarily reflect the official policy of the United States Navy, Department of Defense, or the government of the United States.

©DAN - Alert Diver July/August 2004  
Courtesy DAN Europe

## FEATURED CREATURE

### CHRISTMAS TREE WORM

(*Spirobranchus Giganteus*)

FEATURE RITA BENTO

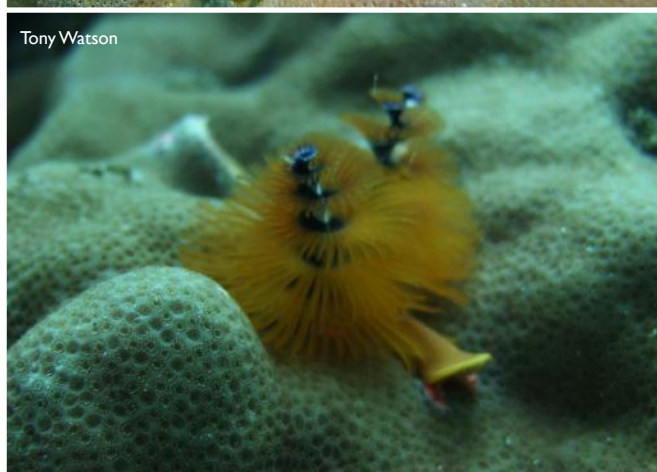
EDA accepts text and photo contributions for this page.

#### FAST FACTS

- The two “trees” are the gills of the worm
- Its body (in a calcareous tube) is embedded in the coral
- Exists in many colours including orange, yellow, blue, and white
- Feeds using its radioles (the hair-like appendages) to catch phytoplankton
- Averages 3.8cm in length
- Found on coral reefs in tropical waters worldwide
- Normally burrowed inside coral heads, primarily genus Porites

#### FUN FACTS

- The name is due to the twin spirals of plumes that look like christmas trees used for feeding and respiration
- Very shy and sensitive to disturbances; rapidly retracts into the burrow at the slightest touch or passing shadow
- With their food, they also collect sand grains that they later use to build their tube
- Reproduces by casting their eggs and sperm into the water
- Once settlement has occurred, it's committed to its location for life



## ANSWERS TO TURTLE QUIZ

1. a. Both turtles and tortoises have scales, lay eggs, and are cold-blooded. They can be distinguished from one another by where they live and how they use their habitats. Turtles spend most of their lives in the water and tend to have webbed feet for swimming. Tortoises are land-dwellers that have round, stumpy feet for walking on land. Terrapins, on the other hand, spend more time on both land and water.

2. a. Some sea turtles migrate thousands of miles on regular routes to nesting spots, much like birds. These world travellers return every two or three years to the same beach to lay eggs, varying the time between nesting according to species. Scientists remain unsure of how the turtles navigate such distances, travelling along the same routes each year to the same destinations. Sea turtles have an extraordinary sense of time and location. They are highly sensitive to the Earth's magnetic field and probably use it to navigate.

3. b. carapace (upper part of shell).

4. d. Many aquatic turtles use the “gape and suck” method to catch preys. They patiently wait for a prey to swim by and then suddenly open their mouths wide and expand their throats. This creates a vacuum, which sucks in the prey. Turtles don't have teeth. Instead, their mouths have sharpened edges, much like birds beaks, which enable them to bite their food. Each species has a jaw shape adapted for its diet (jellyfish, fish, algae, etc).

5. a. Typically, the only time sea turtles leave the sea is when females drag out to lay eggs. On some uninhabited or sparsely-inhabited beaches, turtles of either sex have been observed basking on land.

6. b. Like other marine reptiles and seabirds, sea turtles have a salt gland to rid their bodies of excess salt. This gland is found in the turtles' eyes. The secretion of salt and fluid makes them look as if they are “crying” when they come ashore. These “tears” help keep the eyes free of sand while females dig their nests.

7. b. Research indicates that the sex of an embryo is determined sometime after fertilization, as the embryo develops, and is temperature dependent. Lower nest temperatures produce more males; higher temperatures produce more females.

8. c. The Leatherback Turtle's shell is different from the hard, armour-like shells that most other turtles have. Instead, its shell is leathery and flexible! This adaptation enables turtles to dive 3,900 feet (1,190m) below the oceans surface. If the Leatherback Turtle had harder shells, the water pressure at this depth would crush it!

9. c. Loggerhead – named for its exceptionally large head.

10. a. The largest leatherback ever recorded was almost 10 feet from the tip of its beak to the tip of its tail. Mature leatherbacks typically reach about four to eight feet in length and weigh from 650 to 1,300 pounds. Leatherbacks routinely dive more than 305m (1,000ft.) and they may reach depths of more than 1,190m (3,900ft.) seeking jellyfish. Leatherbacks have high concentrations of red blood cells; therefore, they can retain more oxygen. The muscle of leatherbacks has a high content of the oxygen-binding protein myoglobin. Myoglobin transports and stores oxygen in muscle tissue.

11. b. The green sea turtle gets its name from the colour of its body fat.

12. a. The principal threat to sea turtles are human activities. Nesting areas are becoming scarce due to beach development and disturbances. Nesting females and hatchlings are disturbed by the presence of trash on nesting beaches. Some sea turtles die when they ingest rubbish. Thousands of sea turtles drown in shrimp nets each year. Some people illegally collect turtle eggs for food and for their alleged aphrodisiac effect. Propeller and collision injuries from boats are not uncommon.

## UPCOMING EVENTS

### IYOR DIVES (every 1st Friday of the month until December 2008)

In celebration of the International Year of the Reef (IYOR) 2008, the Coral Reef Awareness and Monitoring Programme (CRAMP) volunteers are conducting reef monitoring at Dibba Rock every first Friday of the month until December of this year. Interested EDA members need to take the Eco-diver course before they can join CRAMP and the IYOR dives.

### ECO DIVER COURSE (July - August 2008)

Pavilion Dive Centre is offering the Eco Diver course to EDA members interested to join CRAMP and the IYOR dives.

### DIBBA MANAGEMENT PLAN DIVES (every Tue & Wed until Oct)

EDA is doing a management plan of Dibba Rock. Interested EDA members who want to join the EDA marine biologist on her weekly dives can contact: 04 393 9390.

### CLEAN UP ARABIA

November 2008

### EDA BEACH PARTY

December 2008



**Chairperson** Mr Faraj Butti Al Muhairbi

**Vice Chairperson** Mr Essa Al Ghurair

**The Secretary General** Mr Jamal Bu Hannad

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

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

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

**Technical Adviser** Mr. Ahmed bin Byat

#### EXECUTIVE TEAM

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Email: diving@emiratesdiving.com

##### EDA Marine Biologist

Rita Bento  
Email: research@emiratesdiving.com

##### EDA Projects Coordinator

Melrose Valencia Kravchenok  
Email: diving@emiratesdiving.com

##### EDA Secretary

Racquel Valerio  
Email: projects@emiratesdiving.com

##### EDA Events Coordinator

Ally Landes  
Email: magazine@emiratesdiving.com

#### MISSION STATEMENT

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

#### LEGISLATION

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

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

#### CONTACT DETAILS

Emirates Diving Association  
Heritage & Diving Village  
Shindaga Area  
P.O. Box: 33220  
Dubai, UAE

**Tel:** +971 4 393 9390

**Fax:** +971 4 393 9391

**Email:** diving@emiratesdiving.com, projects@emiratesdiving.com

**Website:** http://emiratesdiving.com/

## NOTICES

### COURSE DIRECTOR AT AL BOOM DIVING

Congratulation to Francis Uy who has certified as a Course Director!



Francis has been diving for 10 years in the Philippines, Sri Lanka, Egypt, Malaysia and the UAE and has been with Al Boom Diving since 2004.

Al Boom Diving now offers all PADI courses from beginner to Instructor under the direction of Francis.

Contact Al Boom Diving on: 04 342 2993

Email: abdiving@emirates.net.ae

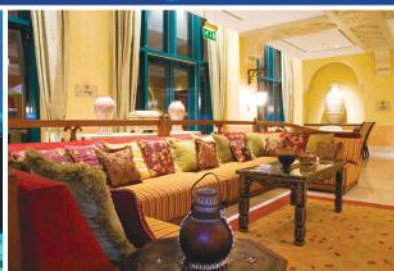
Website: www.alboomdiving.com

### SAYING GOODBYE



We would like to thank Mel Valencia Kravchenok for her two years of loyal and dedicated service at EDA and congratulate her on her recent wedding. We wish Mel the best of luck in her future career endeavor. Mel

has been an asset to EDA and all its events and projects and will be missed by her EDA colleagues.



# Djibouti

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