



# Clearwater

Dhahran Dive Association Newsletter

September 2006  
"Manta Ray Edition"

## A WORD FROM YOUR PRESIDENT

*Radi Adzemovic, President 2006*

As always, the DDA has several excellent events on its agenda. The photo contest is about to start. The entire club will be impressed by your photos and film clips. If you need details go the website. I hope to come back from Farasan Banks later this month with some new footage to edit that will be worth submitting.

There will be three more Monday evening dinners the last one being our Annual General Meeting and election. Please let the board know if you are interested in helping out the club by joining the board. Several positions are currently open. Michael Pham was surplus and had to leave last month. Being part of the board for the past two years has been a rewarding experience for him.

The members who volunteer to be on the board are a great team of talented divers that I have very much enjoyed working with. The Clearwater and the Website are informative, up to date and interesting. The Funfest and Photo Contest have also added to our exposure to the community in their own ways. Your board members are busy folk who have carved out part of their schedules and have lent their skills and time to the DDA and have made the past 2 years quite a success. I have often thanked them privately but wanted to state my appreciation of their work in this edition of the Clearwater.

The DDA is better because of their creativity and commitment. Organizing meetings, signing up new members, maintaining the air station, reviewing safety issues, and keeping financial records is quite a job.



The number of our members, the number of trips and the number of dives that we are seeing at the DDA is exciting. There are several trips being organized this fall so be sure to get underwater with your cameras and get ready to enjoy another season spectacular and safe diving.

## DDA MONTHLY MEETINGS

DDA monthly meetings are held on the last Monday of the month at Ad-Diwan, Room 1, doors open at 6:00pm with a catered buffet dinner and door prizes.

SR40 for members / SR50 for guests / SR20 for kids aged 12 and under (this month only).

### *Our next Monthly Meeting is:*

- **Monday, September 25** (the last Monday of the month) "DDA Monthly Meeting" to be held in Ad-Diwan, ROOM 1 @ 6.00pm.

## DDA PHOTOGRAPHY COMPETITION

Please see the 2 page attachment at the end of this newsletter for details on how to enter this exciting competition or the DDA Website:

<http://www.dhahrandiving.com/ddaPhotoContest.asp>

## BOARD MEMBER RESIGNATION

It is with a heavy heart that I must say good bye to my fellow Board members and fellow divers. I shall miss your comradery and good fellowship. I will see some of you on future dive trips I'm sure if not in the Red Sea then on other exciting dive spots around the world. I am hereby resigning from my position of Vice-President of the DDA Board effective Aug 19th 2006. I wish the DDA and you all the best and safe diving.

*Michael Pham*

## CREATURE PROFILE FEATURE

By James Vandervyver

### Manta Ray - *Manta birostris*

**Kingdom:** Animalia - animals

**Phylum:** Chordata - chordates

**Subphylum:** Vertebrata - vertebrates

**Class:** Chondrichthyes - cartilaginous fishes, ray

**Subclass:** Elasmobranchii – cart. fishes, Rays

**Superorder:** Batoidea - Batoids

**Order:** Myliobatiformes - Eagle & Manta Rays

**Family:** Myliobatidae - Manta/Devil Rays

**Genus:** Manta

**Species:** *Manta birostris* - Atlantic Manta Ray

The name of manta is derived from the Spanish word, meaning blanket.



### Biology

Manta rays are easily recognized in the ocean by their large pectoral "wings." *Manta birostris* have no dorsal or caudal fins. They have two cephalic lobes that extend from the front of the head and a broad, rectangular, terminal mouth containing small teeth exclusively in the lower jaw. The gills are located on the underside of the body.

Manta rays also have a short, whip-like tail that, unlike many rays, has no sharp barb. Manta rays show little dimorphism between the sexes with wingspan in males ranging from 5.2 - 6.1 meters and females ranging from 5.5 - 6.8 meters. The largest ever recorded was 9.1 meters. The entire skeleton is made of cartilage, which allows for a wide range of motion.

*Manta birostris* are sexually mature at 5 years of age. The mating season of sexually mature manta rays occurs from early December to late April. Mating takes place in tropical waters (26-29 degrees Celsius), and around rocky reef areas from 10-20 meters in depth.

Mantas are ovoviviparous, with each of the pups wrapped in a thin-shell that hatches inside the mother, later to be born alive. They usually have a litter size of 1 to 2 (usually 2) pups, with birthing occurring in relatively shallow water, where the young remain for several years before expanding their range farther offshore.

### Nature

Manta rays are solitary, free swimmers who are not territorial. They use their flexible pectoral fins to swim gracefully through the ocean. Manta rays are most active during the mating season, and have been recorded leaping out of the water to heights of 7 feet, then smacking against the surface. Mantas also have a symbiotic interaction with remora fish, which attach to the giant mantas and hitch rides with them while feeding on the mantas parasites and on plankton.

### Coloration

Their coloration vary, ranging from black, greyish blue, to greenish or reddish brown above, and nearly black, white with various degrees of greyish blotching, to almost pure white below. The skin of manta rays is rough and scaly, like that of most sharks.

### Size, Age, and Growth

The disc size of the Manta at birth is about 4 feet (1.2 metres); maximum disc width 22 feet (6.7 metres), possibly larger (reported to widths of up to 30 feet or 9.1 metres), maximum recorded weight 3 100 pounds (1 400 kilograms).

### Food Habits

Manta rays are filter feeders and primarily planktivores. They often slowly swim in vertical loops. Some researchers suggest this is done to keep the rays prey within the area while feeding. Their large, gaping mouths and cephalic lobes unfurled are used to corral planktonic crustaceans and small schooling fish.

Manta rays filter water through their gills and organisms in the water are trapped by a filtering device, which consists of plates in the back of the mouth that are made of pinkish-brown tissue that span between the supports structures of the gills. The teeth of Mantas are nonfunctional during feeding.

When feeding, the cephalic lobes are unfurled and spread, the animal often swimming in slow somersaults (vertical loops) that are repeated over and over (this behavior may keep the rays within a patch of particularly rich feeding, and may also concentrate planktonic prey to facilitate feeding);

### **World Range & Habitat**

Mantas are found all around the globe, generally between 35 degrees north and south latitude. They are found most often in near shore waters (mainly over continental and insular shelves, but occasionally over deep water), near coral and rocky reefs. They are capable of rapid speed and juveniles sometimes leap well clear of the water, landing with a loud slap often host to one or more discfishes (especially the remora, *Remorina albescens*) and sometimes observed in association with dolphins, seabirds, sharks, and other rays.

They are usually found near the surface of the ocean and to depths of 120 meters. Atlantic manta rays stay closer to shore in the warmer waters where food sources are more abundant, but occasionally can be found further from shore.



### **Danger to Humans**

The Manta poses minimal danger to humans unless attacked (especially harpooned) or otherwise startled, but the enormous size and power of this ray should invite respect. As mentioned before, unlike many rays, the Manta has no sharp barb on its tail.

### **Economic Importance for Humans: Positive**

In the past, Mantas were commercially hunted from small boats. Currently this species is rarely hunted. The biggest impact that the manta ray currently has comes from tourism, with dive industries being created for tourists who want to swim along side these gentle giants.

Inquisitive mantas will approach and even solicit attention from divers, apparently enjoying the stimulation provided by human contact and the bubbles from scuba exhaust. It has been recorded that manta rays that frequently encounter humans will shy away from contact with humans.

### **UPCOMING DIVE COURSES**

**PADI Advanced Diver Course** during Red Sea trip Nov 23 – Nov 24.

**PADI Rescue Diver Course with EFR (First Aid) & DAN Oxygen Administration.**  
Course dates Nov 10 - Dec 10.

Contact: Colin Knight, 874 0726, 878 1022, 050 101 4874  
[colin.knight@aramco.com](mailto:colin.knight@aramco.com)

### **MARINE NEWS**

One litre of seawater can contain more than 20,000 different types of bacteria, scientists have found.

<http://news.bbc.co.uk/2/hi/science/nature/5232928.stm>

### **Environmental 'crisis' in Lebanon**

An oil slick caused by bombing of the Jiyeh power station now covers 80km (50 miles) of coast.

Local environmental groups describe the slick as an "environmental disaster".

<http://news.bbc.co.uk/2/hi/science/nature/5233358.stm>

## MARINE BIOLOGISTS SOUND ALARM FOR CORAL REEFS, COASTAL SEAS

**CBC News, Article submitted by Alfred Vouk**

Most marine parks fail to protect the world's tropical coral reefs from illegal fishing, mining and pollution, a Canadian-led research team says.



*Scientists are casting doubts on the effectiveness of marine protected areas. (Courtesy of Census of Marine Life)*

The reefs are home to species including clown fish and sharks, and the areas help protect coasts from erosion. On paper, marine protected areas cover nearly 19 per cent of tropical reef habitat. "Less than two per cent are extended protection complete with regulations on extraction, poaching and other major threats," the study's authors wrote in a policy paper in Friday's issue of the journal *Science*.

Camilo Mora of Dalhousie University in Halifax and his colleagues studied how reefs are protected by marine protected areas (MPAs) from the Caribbean to the Indian Ocean. "Unfortunately, the establishment of MPAs is rarely followed by good management and enforcement, which means that the numbers of MPAs and their coverage can be misleading indicators of effective conservation," the team said.

They call for global conservation strategies to be reassessed to expand the size of MPAs, as well as curb poaching and fishing on reefs.

### **Humans harm species: study**

The same issue of the journal includes a report on human disturbance to coastal ecosystems in Europe, North America and Australia.

The study looks back to the impact of the ancient Romans on the Adriatic Sea, noting the damage has accelerated in the past 150 to 300 years as populations and demand for resources have grown. Historically, estuaries and coastal seas offered habitat for commercial fish species, and a buffer for natural disasters, says Heike Lotze, a marine biologist at Dalhousie and the study's lead author.

Human exploitation is responsible for 96 per cent of species extinctions, often in combination with habitat destruction. The two destructive effects should be a priority for restoration plans, the study's authors said. Despite the degradation, some birds and seals are recovering, raising hopes for conservation efforts.

### **DIVER TALKS OF 'AMAZING SURVIVAL'** A diver who swam for three-and-a-half miles in appalling North Sea conditions has spoken of his ordeal.



John Mallard, 62, from Arbroath, had been with his son and a friend in the water near Stone haven, Aberdeenshire, when he disappeared from their sight. He managed to swim ashore and knocked on the door of a house in Inverbervie.

"I was determined to make it back," he said. "I was worried that my son hadn't made it and had to keep going because my daughter would be left with no-one." Mr Mallard, a retired commercial diver, disappeared near Todhead Point, south of Stonehaven, on Friday while looking for lobsters. He became separated from his diving buddies when he returned to the surface and they continued with their dive.

A huge rescue operation was launched at 1940 BST after his son raised the alarm. "When I got to the surface the weather had turned nasty and the tide was sweeping me out to sea," Mr Mallard said. "It was getting dark and waves were coming over my head - I couldn't see anything.

"I filled up my life jacket with air from my tank and swam for it. I didn't know where my son Sean and his friend were, I didn't know if they had been swept out too.

"I thought that if they made it to shore then they would call the coastguard but I couldn't see them on the shore so I didn't know if anyone was coming for me."

Mr Mallard said it was thoughts of his family that kept him going.



"I could make out lights but did not really know where I was - I just kept those lights in sight and swam towards them but I kept being pushed back and I kept on swimming trying to find a safe place to get on land."

He could see the lifeboats and the helicopter scouring the area but they kept missing him. "Every time I saw the helicopter or one of the boats I stopped in the water in the hope they would see me I had a flashing light but they couldn't see it," he said.

"I attached myself to a creel buoy hoping they would see me all the time I was being battered against the buoy - but they didn't see me and I got cramp but I forced myself to swim on. "I thought the search had been called off because it was dark - I thought they had given up on me."

He eventually saw the bay and let the waves take him in. "I was bowled on to the beach," he said. "I kept hold of my gear and headed up the beach towards the houses. "I knocked on a door and a surprised looking woman gave me a cup of tea and let me use her phone. "An ambulance came to check me out and I was fine so I went back home."

**'Windy night'** Lalita Sharma had been watching TV at her home when she heard a knock at the door at about 2340 BST. "There was this man wearing a diving suit at the door and asked to use the phone," the 52-year-old civil servant said.

"It was the last thing I was expecting. I had heard something about a search on the news and I realised that this was the same man who was missing. "He looked exhausted and could hardly

walk or stand," she said. "I made him a cup of tea to warm him up and comfort him and then the ambulance people took over from there. "He was lucky to be alive because it was such a cold and windy night out there - I am just glad that I was able to help in some way." When Mr Mallard returned to his Arbroath home he had a hot bath, a cup of cocoa and went to bed.

**'Amazing story'** "I just got up as normal the next day but I treated myself to a cooked breakfast," he said. "I felt great in the morning and went off for a seven-mile walk." Stonehaven, Aberdeen, Portlethen and Montrose coastguard rescue teams had been involved in the four-hour operation.

A rescue helicopter from RAF Lossiemouth was scrambled, the RNLI Montrose and Aberdeen lifeboats were launched and they were joined by a Maritime Rescue Institute lifeboat from Stonehaven. Forth Coastguard Watch Manager Bob Abercrombie said "This is an amazing survival story. The diver had been missing for about four hours and we had begun to extend the search, by bringing in additional resources.

"The conditions for searching were not good with northerly force five winds, poor visibility, rough sea and rain, quite apart from the fact that it was dark for most of the search. "This is a great result to an incident which at one point looked as though it would have quite a different outcome."



Mr Mallard knocked on the door of a house in Inverbervie

## U/W PHOTOGRAPHER COMPETITION

DAN Europe has an excellent competition website for underwater photographers and enthusiasts. Get your entries in or just browse the collection of photos.

<http://www.daneurope.org/photocontest/eng/>

**...Just DDA It !!**

A red starburst graphic with a white outline, positioned below the text.

## MOTION SICKNESS

*Article summarized by Colin Knight*

The following summary is from an article in the latest edition of 'Alert Diver', the magazine received by members of the Diver's Alert Network, (DAN), which many DDA members subscribe to. DAN membership benefits include medical assistance in the event of a diving emergency world-wide and travel assistance, extendable to family members. Middle East residents can join DAN Europe.

Alert Diver articles are available on-line at:

[www.daneurope.com](http://www.daneurope.com) (currently 3rd Quarter 2006 is the latest)

"Seasickness results when the eyes are seeing one thing while the balance organ (the semicircular canals) detects another - your movement up and down. The brain gets confused, figuring out why your eyes tell it you are stationary, but your inner ear tells your brain you are moving. Other factors can compound the problem. Vomiting may make you feel better, but the symptoms will not resolve until the inner ear acclimates to the motion or you use another form of treatment.

Seasickness tends to diminish after a few days without treatment. Generally, the more time you spend on a boat, the less severe the sickness becomes. When some individuals become acclimated to the motion, readjusting once they're back on land may take some time.

### How can you avoid motion sickness?

**Positioning** - If the boat is rocking bow to stem, seek out a spot in the middle of the boat for the least movement. A lower cabin may be more suitable than a top deck outer cabin. And remember, the smaller the boat, the larger your potential for sickness, as smaller boats tend to rock more quickly.

**Fix on an object** - Look beyond the boat: use the horizon as a reference point. This helps your brain to adjust more easily to the unstable environment. Avoid focusing tasks like reading, setting up equipment and writing.

**Fresh air** - If you're feeling ill, nothing worsens it like diesel fumes. Find a spot away from the flames, where fresh air blows. Keep a reference point by looking at the horizon.

Keep something in your stomach - Stay well hydrated before and during your trip. Sip water, juice or sports drinks, but avoid carbonated drinks, alcohol and caffeine. If you are nauseated, don't drink lots of water since it will create an unpleasant sensation of sloshing in your stomach. Eat saltines or bread to absorb stomach fluids.



### SOME REMEDIES FOR PREVENTION

There is no cure for motion sickness, but a plethora of medications, devices, procedures and herbal remedies are touted to alleviate its symptoms. If you have discovered a safe system that works, stick with it. The article discusses many remedies, but the following information about the patch is reproduced since many DDA members use it successfully.

"Many divers have used Transderm Scop (the patch with scopolamine as its main ingredient) to relieve seasickness. With few reported problems, this patch releases the drug slowly through the skin; it can be very effective against motion sickness for as long as three days. Since the medication affects the central nervous system, however, it can have side effects that may impair your ability to dive safely. The most common side effects are dry mouth and blurred vision. Fingers that contact the medication side of the patch and touch the eye will cause the pupil to dilate. After handling the patch, wash your hands thoroughly. Other side effects, more common in children and elderly people may include hallucinations, confusion, agitation or disorientation. The dosage is fixed and cannot be altered by cutting the patch. You can get SCOPACE, a tablet form of scopolamine, by prescription. Taken an hour before travel, each dose will last up to eight hours. Benefits of the tablet over the patch can include a faster onset, flexibility with dosages and fewer side effects.

## PASSIVE STINGRAYS CAN BE DEADLY

By Danny Rose and Jane Williams, AAP, Sept 4, 2006.

Stingrays are considered passive creatures, but their venom and their barbed tails can be deadly, experts say. Even so, fatal attacks such as the one that killed television star and naturalist Steve Irwin are extremely rare.

Irwin, 44, died today when a spear-like stingray barb pierced his chest while diving on the Great Barrier Reef, and it's believed he may have had a heart attack.

Irwin's death was only the third known stingray death in Australian waters, said shark and stingray expert Victoria Brims from Oceanworld Manly, in Sydney.

She said Irwin probably probably had an extreme allergic reaction to the stingray's venom. A sting from a ray's tail caused a rapid deterioration of tissue.

A sting on the arm or leg can be painful but fairly harmless, but if the sting hits the heart it can result in a massive heart attack or a severe allergic reaction, Ms Brims said.

"Given his death appears to have been pretty sudden it was most likely some sort of allergic reaction," she said.

Marine biologist Dr Meredith Peach said stingray attacks were uncommon.

"It is really quite unusual for divers to be stung, unless they are grappling with the animal and knowing Steve Irwin perhaps that may have been the case.



**Bull Ray over reef in Queensland**

"Most stings would be on the legs or feet, it is very unusual to be stung on the chest. "It is highly unusual, extremely unusual for people to die from stingray stings."

Stingrays are mostly gentle bottom-dwellers which live at depths of 30m to 60m in the warm waters of the Great Barrier Reef, growing up to four metres long and weighing up to two tonnes.

Stingrays will generally avoid people if left alone, and most stingray injuries occur when a person steps on one of the creatures, marine experts say.

Typically, all that results is a non-fatal gash to the legs. Dr Peach, the author of the website [www.sharkchic.com.au](http://www.sharkchic.com.au), said there were more than 100 species on stingray in Australian waters - the largest measuring up to 2m across. She said a much smaller stingray could still inflict a blow severe enough to pierce the chest.

Professor David Booth, a fish ecologist who dives regularly on the Great Barrier Reef, said being impaled by a stingray was a less common but still potentially deadly injury. "Certainly the injuries I've seen have been penetrating wounds where someone has stepped on the animal," Prof Booth said today.

"I've seen a horrible one when the spine went through a guy's leg muscle." "But the big ones have enough inertia in their body that if you go near them they can whip their tail around and get you. "The lashing involves the tail coming back over the body on the top side and they are pretty accurate with their spine."

Prof Booth said multiple factors could have contributed to Irwin's death, including being seriously injured while diving and rising to the surface too quickly.

"I wouldn't want people to think it is a risky activity, diving on the reef because of stingrays," Prof Booth said. "They are the least of the dangers actually."

Wildlife filmmaker David Ireland said the barb that struck Irwin could have been as deadly as a rifle bayonet driven into one of his vital organs.

Ireland said on Southern Cross radio that working with stingrays was potentially very dangerous.

"They have one or two barbs in the tails which are not only coated in toxic material but are also like bayonet, like a bayonet on a rifle. "If it hits any vital organs it's as deadly as bayonet. "Wild animals are incredibly fast and a lot of animals have got very efficient defence mechanisms.

"We are very vulnerable as humans, working with animals like that. "Stingrays feed by sitting on the bottom of the ocean and by sifting out molluscs and shells as they pump water through their gills.

Treading on the dorsal surface by mistake or swimming too close above a ray could result in a reflex upward and forward swing of the tail, according to Carl Edmonds' Dangerous Marine Creatures Field Guide for Medical Treatment. Stingrays could inflict either sword like lacerations or penetrate the body using their serrated spine.

## AUSTRALIA'S SMALL BUT DEADLY CREATURES *By Ruth Park*

Queensland in Australia is renowned for being home to some of the world's deadliest creatures, both on land and underwater. This didn't put me off what I had been told was the best wreck dive in Australia, the SS Yongala. I booked a dive on the wreck for the following morning. I was excited at the thought of encountering the sharks, such as bronze whalers, bulls and tigers that patrol the wreck.

The 40-minute boat drive from Ayr to the site was exhilarating, if a little rough. The boat bounced over the waves, spray hitting us from all angles. I was one of eight experienced divers and I was wearing a full wetsuit, but no gloves or boots. When we arrived, I saw why novice divers would struggle. The surface swell was tremendous and two of the divers had to abort the dive before even reaching the wreck because they were so over-exerted and had used up most of their air.

The SS Yongala was nicknamed 'the ghost ship' because 124 sailors perished after a cyclone hit the passenger ship in 1911. It is one of the best-preserved wrecks in the southern hemisphere. The remains of those who lost their lives were moved to the bow as a mark of respect and divers are banned from entering the vessel. I had never experienced a dive quite like it. There was an abundance of fish. I could barely make out the wreck behind the thousands of fish swarming around it. There were giant trevallies, barracuda, Maori wrasse and olive sea snakes

and what seemed like millions of sweetlips. My buddy pointed up and behind me, and I turned to see two potato cod, each nearly 2metres long.

However, the amazing experience was about to take a new direction. It was 20 minutes into our second dive at a depth of 24m when some worrying symptoms began to develop. I noticed a severe burning sensation around my mouth. I signalled to the dive master that I had been stung. He found a pencil and began scribbling on his slate. I could feel my chest tightening and I was finding it difficult to breathe. 'Tingling?' he wrote. 'No. Burning,' I wrote. I could hear my heart beating wildly and I realised I had a serious problem. My heartbeat was making abnormal sounds. I was having a heart attack, although I didn't know this at the time. I signalled that I needed to go up. 'Pain?' he wrote and signalled 'small', 'medium' and 'large' with his fingers. 'Large,' I signalled. My whole body ached. The lower part of my back felt as though it had been hit with a sledgehammer.



The pain was excruciating. All of a sudden, I lost the use of my legs. 'Back pain?' he wrote. I nodded furiously with all the energy I could muster. I could see the panic in his eyes. We began our ascent. I knew my only chance of reaching safety was to remain calm and breathe as best I could. When I reached the surface I was barely conscious and I was given oxygen on the boat. My body became rigid and I couldn't find any position that would ease the pain.

I was extremely weak and drifting in and out of consciousness. The next thing I remember was the skipper telling everyone to get on the boat and saying that we had to leave immediately. There was a crackling on the radio and I heard the word 'ambulance'. A wave of peace and calm suddenly came over me like a warm blanket. I didn't feel strong enough to fight and thought I might be 'going', although this didn't seem so bad.

I was then jolted about as two of the divers carried me and ran through the surf towards an ambulance on the beach. 'What is your name? Did you see what stung you? Are you allergic to anything?' voices asked. I was given morphine orally, my wetsuit was removed and needles were being put in both legs. I could see the heart defibrillation pads. I woke up surrounded by doctors - I was having massive convulsions. They wrapped me in foil and gave me 30mg of morphine. There was lots of scurrying about and lots of voices. 'Am I dying?' I murmured. 'Not if I can help it sweetie,' came the broad Aussie reply.

I spent two days and nights hooked up to lots of machines with the undivided attention of the staff at the hospital. Tests confirmed I had suffered a heart attack and that I had been the unfortunate victim of the potentially fatal Irukandji Syndrome, the result of sting by an Irukandji jellyfish. This virtually invisible thumbnail-sized jellyfish is a smaller relation of the more infamous box jellyfish. I assume it stung me on my ungloved hands, and I think it got me as we were descending while holding the rope - either that or on the mouth or exposed feet, it is impossible to tell as it leaves no marks.

Following two nights in Critical Care I suffered a tight chest for several days. After being discharged I returned to the UK, but ended up in Accident and Emergency the week I got back, where I was told I had an abnormal ECG. I'm not sure about long-term effects - I'm told it is an acute illness but no one really knows that much about it. While this is a very rare occurrence, there were lessons to be learned from the dive. Firstly, don't rely on the dates of the 'stinger season' being accurate, apparently a change in current brought them down the coast, although this is unconfirmed. Secondly, wear gloves and boots in Queensland. And, finally, it's not sharks that you should be wary of but smaller, far deadlier, creatures.

## MARINE LIFESTYLES

**Seahorses** are marine fish belonging to the genus *Hippocampus* of the family Syngnathidae. They are found in temperate and tropical waters all over the world.

Seahorses range in size from 16 mm (the recently discovered *Hippocampus denise* [1]) to 35 cm.

They are notable for being the only species where the males become pregnant.

The seahorse is a true fish, with a dorsal fin located on the lower body and pectoral fins located on the head near their gills. Some species of seahorse are partly transparent, hence are often not spotted in aquariums despite being there and are also not often seen in pictures.



Seahorse populations have been endangered in recent years by overfishing. The seahorse is used in traditional Chinese herbology, and as many as 20 million seahorses may be caught each year and sold for this purpose. [2]

Import and export of seahorses has been controlled under CITES since May 15, 2004.

## MANATEE SEEN IN NEW YORK

*August 8, 2006*

NEW YORK Lots of folks who live in Florida in the winter head back to New York during the hot summer. Now they've got some unusual company.

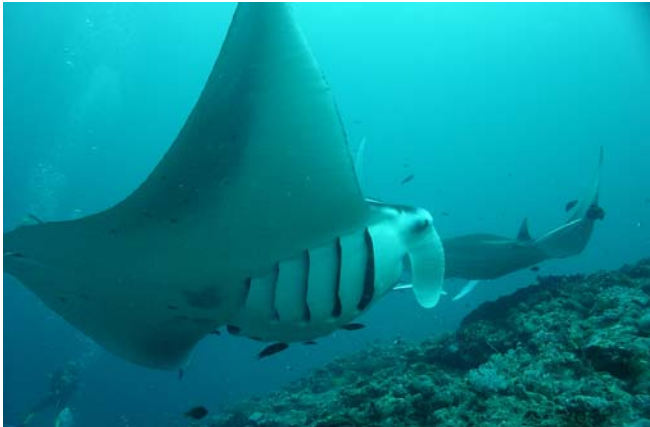
A manatee is swimming in the Hudson River. The huge animal has been spotted three times in the last week, off the coast of New York City and then up near Westchester. There was plenty of disbelief to go around, but experts who know a manatee when they see one say there's no doubting it. The creatures normally stay in the warm waters of Florida, but have been known to go as far north as Rhode Island.

...Just DDA It !!  


## MALDIVES TRIP

*Submitted by Fahad Al-Ghubari*

Fahad visited Kurumba Island in the Maldives for 7 nights from June 25 to July 4, 2006. He had a wonderful stay on the island and took in a few days of diving. He encountered some wonderful sea creatures on the trip including Manta Rays, White and Black Tip Reef Sharks, Napoleon Wrasse, Octopus, Stonefish and Turtles. The photos tell the story of his enjoyable trip. Fahad is an Advanced Diver who is currently training for his Rescue certification.



*Manta close up...*



*Turtle even closer...*



*Stonefish well camouflaged...*

## DIVE HUMOUR

*Submitted by Colin Knight*



### *Children Writing About The Sea:*

*This is a picture of an octopus. It has eight testicles. (Kelly age 6)*

*Oysters' balls are called pearls. (James age 6)*

*If you are surrounded by sea you are an Island. If you don't have sea all round you, you are in continent. (Wayne age 7)*

*Sharks are ugly and mean, and have big teeth, just like Emily Richardson. She's not my friend no more. (Kylie age 6)*

*A dolphin breaths through an asshole on the top of its head. (Billy age 8)*

*My uncle goes out in his boat with pots, and comes back with crabs. (Millie age 6)*

*When ships had sails, they used to use the trade winds to cross the ocean. Sometimes, when the wind didn't blow, the sailors would whistle to make the wind come. My brother said they would be better off eating beans. (William age 7)*

*I like mermaids. They are beautiful, and I like their shiny tails. How do mermaids get pregnant? (Helen age 6)*

*I'm not going to write about the sea. My baby brother is always screaming and being sick, my Dad keeps shouting at my Mom, and my big sister has just got pregnant, so I can't think what to write. (Amy age 6)*

*Some fish are dangerous. Jellyfish can sting. Electric eels can give you a shock. They have to live in caves under the sea where I think they have to plug themselves into chargers. (Christopher age 7)*

*When you go swimming in the sea, it is very cold, and it makes my willy small. (Kevin age 6)*

*Divers have to be safe when they go under the water. Two divers can't go down alone, so they have to go down on each other. (Becky age 8)*



**DIVE COURSES ON OFFER:**

➡ **Adel Al-Bassam:** 873-7696/Cell: 055861940/email: [adel.bassam@aramco.com](mailto:adel.bassam@aramco.com)

**PADI** Open Water, Advanced, Rescue, Emergency First Response/CPR/First Aid, DAN Oxygen Provider; Dive Master Courses ongoing. Can be tailored to meet your specific needs, Refresher classes anytime. Specialty courses please enquire. Please call for details.

➡ **Helmut Bock:** 872-7449 or 878-9727/email: [helmut.bock@aramco.com](mailto:helmut.bock@aramco.com)

**PADI** Open Water, Advanced, Rescue, Emergency First Response, DAN Oxygen Provider, Nitrox and Divemaster Courses ongoing. Families welcome -- please call for details. Refresher classes anytime. Advanced and Specialty courses (*Nitrox, U/W Navigation, U/W Photography, Boat Diver, U/W Naturalist, Multilevel Diver, Deep Diver, Night Diver, Peak Performance Buoyancy, Wreck Diver and more*) during dive trips, please enquire.

➡ **Lope J. Caacbay:** Home tel. 861-1573 or Mobile 058108699, email: [lope.caacbay@aramco.com](mailto:lope.caacbay@aramco.com)

**PADI** Master Instructor/ IDC Staff and EFR Instructor No. 600175. **IANTD** Advanced Nitrox Instructor No. 2796. **IDEA** Instructor Trainer. Year round training on PADI recreational to extended range diving/IANTD courses. Don't hang up that gear, we can still train all year round! Flexible class schedule to accommodate participants' needs. Call for more details. For further reading about IANTD, visit: <http://www.iantd.com>

➡ **John Nilsen:** 878-3839/email: [john.nilsen@aramco.com](mailto:john.nilsen@aramco.com) **NAUI** Scuba Diver (entry-level) through AI/DM.

➡ **Randy Demaree:** 878-8521 or 873-9089

**PADI** Open Water and Advanced Open Water, Rescue and Dive Master, Emergency First Aid/CPR, DAN Oxygen Provider. Other courses: PADI Deep Diver, Boat Diver, Underwater Naturalist, Wreck Diver. Courses can be tailored to meet your specific needs -- please call for details. Refresher classes anytime.

➡ **Farid Zoldjalali:** Home 875-1845 or Mobile 0504984166, email: [Farid.Zoldjalali.1@aramco.com](mailto:Farid.Zoldjalali.1@aramco.com)

**PADI** Open Water, Advanced, Rescue, Emergency First Response/CPR/First Aid, Dive Master courses are ongoing. Courses can be conducted in both Arabic and English and can be tailored to meet your specific needs. Refresher courses can be arranged anytime. For Specialty Courses, please call for details.

➡ **Colin Knight** (874-0726/878-1022/Cell: 050 101 4874 /email: [colin.knight@aramco.com](mailto:colin.knight@aramco.com)

**PADI and DAN course dates will be set up to suit you.**

- Open Water courses – schedules set up to suit the student's needs.
- Advanced Diver courses conducted during Red Sea trips
- Rescue Diver / Emergency First Response Course / DAN Oxygen Administration
- DAN Hazardous Marine Animal Course (new)
- Specialty courses in the Red Sea & Half Moon Bay (*U/W Navigation, Search & Recovery, U/W Photography, Boat/Wreck Diver, U/W Naturalist, Multilevel Diver, Deep Diver, Night Diver, Peak Performance Buoyancy*)
- Nitrox courses run anytime.
- Dive Master Course- academics & water skills can be started immediately.

➡ **Ibrahim K. Al-Haidan** (874-1257) Mobile: 050 581 9642 /email: [ibrahim.haidan@aramco.com](mailto:ibrahim.haidan@aramco.com)

- Basic Open Water Diver/Open Water Diver
- Advanced Open Water Diver
- Master Diver
- Assistant Instructor
- Nitrox Diver, Scuba Master Diver and Medical First Aid 1 and 2.



Courses can be conducted in both Arabic and English and can be tailored to meet your specific needs. Refresher courses available anytime and for Specialty Courses, please call for details.

➡ **Sheryl Wright:** 878-2796/email: [sheryl.wright@aramco.com](mailto:sheryl.wright@aramco.com) **PADI** Open Water, Advanced, Rescue, Dive Master, Emergency First Response and Refresher courses. Female only classes are also available on request.

## 2006 DDA BOARD MEMBERS

### The Official DDA 2006 Board

We are proud to present to you the 2006 elected board members. These board members are a dedicated volunteer team that is there to ensure that all the DDA members' needs are met.

Board Positions	Contact Person	Contact Number
President	<a href="#">Radi Adzemovic</a>	874-6022
Vice-President		
Treasurer	<a href="#">Farid Zoldjalali</a>	873-6707
Secretary	<a href="#">Sean Rahati</a>	873-4672
Membership Director	<a href="#">Debbie Nanninga</a>	877-6108
Air Station Director	<a href="#">Rene Seco</a>	873-0547
Air Station Director	<a href="#">David Gruno</a>	874-5696
Equipment Director	<a href="#">Ibrahim Haidan</a>	874-1257
Equipment Director	<a href="#">Sadeq Al-Qaffas</a>	877-8502
Training Director	<a href="#">Adel Bassam</a>	873-7696
Dive Activities Director	<a href="#">Ahmad Al-Ahmari</a>	874-0883
Social Activities Director	<a href="#">Aida Rouhana</a>	877-8173
Clearwater Editor	<a href="#">Sheryl Wright</a>	874-6107
Member at Large	<a href="#">Bruce Jahnke</a>	874-7947
Website Coordinator	<a href="#">James van der Vyver</a>	874-6671
Marine Life Awareness Coordinator	<a href="#">Dr. Abdulrazack Amir</a>	877-3524



## 2006 DDA MEETING/SOCIAL SCHEDULE

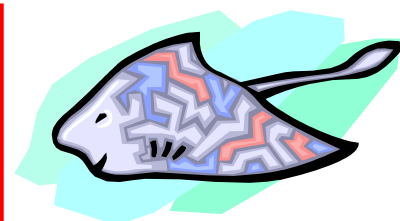


Meeting Date	Venue	Guest Speaker	Topic
Monday, Sept 25	Ad-Diwan, Room 1	Doug Cook	Key Largo Pennkamp Park Pets- A Look Back to 1980
Monday, Oct 30	Ad-Diwan, Room 1	DDA	Results of photo competition and dinner
Monday, Nov 27	Ad-Diwan, Room 1	DDA AGM	Wrap up of 2006 and DDA plans for 2007



**GET YOUR NAME IN PRINT!**  
**SEND IN YOUR DIVE ARTICLES**  
**TELL US YOUR STORY!!**

**HELP!** Email to [sheryl.wright@aramco.com](mailto:sheryl.wright@aramco.com)  
 or send to P.O. Box 10496, Dhahran

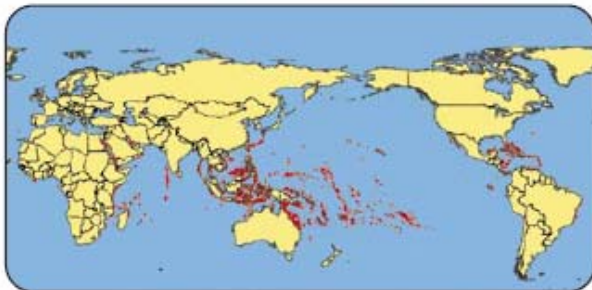


## Protect coral reefs

Coral reefs are the largest structures built by living organisms. The living part of the reef, a relatively thin skin over hard skeleton, contains many species of corals whose bodies are made of millions of polyps. These polyps form the skin of the reef which secretes an external skeleton made of limestone. Coral skeletons come in all shapes and forms, and with the living tissue of the coral, produce dazzling arrays of shapes and colors.

Inside the living tissue, corals harvest tiny algae which use sunlight and the process of photosynthesis to make food that is shared with the coral animal. In return, the coral animal provides its waste products as nutrient to the algae which use them for food production. This very intimate relationship, known as symbiosis, and the recycling of nutrients, is the driving force behind the construction of the enormous coral reefs. It also explains why corals live very close to the sea surface, and can (and need to) live in nutrient-poor oceanic environments.

The coral animal increases in size by adding new skeleton on top of old skeleton, where the coral tissue recedes and abandons the old part of the skeleton.



*Locations of coral reefs (in red) around the world.*



Therefore, when one observes a large head of coral, such as a brain coral, one ought to appreciate that the external living part of the coral colony extends only a few centimeters below the surface. The remaining portion is simply limestone. It is the process of accumulation and compaction of coral skeletons, with the help of other organisms that cement things, which create the majestic reefs we see in places like the Red Sea.

Only tropical rainforests can boast a larger biodiversity than coral reefs, which are home to many thousands of species of animals and plants, from the miniscule goby fish to the large predator sharks. Therefore, it is all the more concerning that corals are very sensitive to disturbance, whether natural or man-made. Corals bleach and die when seawater temperature rises above average for a few days or weeks. Corals are extremely sensitive to nutrient enrichment be it from agricultural run-off or sewage discharge to the sea. Dredging and filling operations produce heavy loads of sediment in the water, which can easily overwhelm the clearing ability of the coral polyps, eventually smothering and killing corals.

The message is very clear: Coral reefs are natural treasures and resources. They are centers of biodiversity – immense in size yet extremely sensitive – we should do everything in our power to protect, not only for their beauty but for the health of the marine environment.

---

*Yusef H. Fadlala, Environmental Engineering Division, EPD.*

# DDA 2006 DIVE SCHEDULE

DDA Dive Activities Director, Ahmad Al-Ahmari announces the following dive trips to help you plan early. For further information contact Ahmad Al-Ahmari <mailto:ahmad.ahmari@aramco.com>, or the relevant trip leader (see contact list below). *To sign up for any of these dive trips contact the trip leader directly.*

Date	Destination	Trip Leader/ Contact	Max Persons	Details/Cost (Approx.)
Aug 30 to Sept 2	Farazan Banks	<a href="http://www.scubaclubonline.com">www.scubaclubonline.com</a>	20	SR2750 on Liveaboard all inclusive. Depart 6pm Wednesday and return 10pm Saturday.
Sept 20 to 23	Abu Latt Is. Farazan Banks	<a href="http://www.scubaclubonline.com">www.scubaclubonline.com</a>	TBA	SR2500 Camp and dive 3 day long weekend trip. Depart 2pm Wednesday and return 10pm on Saturday.
October 19 to 26	Maldives	Colin Knight <i>(please contact directly for more details)</i>	No max.	Maldives Dive trip (Bandos Island Resort). 2 L days for 6 days of diving. Cost is approx. SR7,200 sharing room and SR7,900 single room.
October 24 to 27	Jeddah Durrah AlArrus Resort	<a href="http://www.scubaclubonline.com">www.scubaclubonline.com</a>	No max.	SR3000 hotel all inclusive. Depart 8am Tuesday and return 10pm Friday.
November 9 to 10	Jeddah	<a href="http://www.scubaclubonline.com">www.scubaclubonline.com</a>	20	SR1500 Inclusive sleep on boat. Depart 8am on Thursday and return 8pm on Friday.
November 23 to 24	Jeddah	<a href="http://www.scubaclubonline.com">www.scubaclubonline.com</a> <i>(or contact Colin Knight)</i>	20	SR1500 Inclusive sleep on boat. Depart 8am on Thursday and return 8pm on Friday.
December 13 to 15	Farazan Banks	<a href="http://www.scubaclubonline.com">www.scubaclubonline.com</a>	28	SR2750 on Liveaboard all inclusive. Depart 6pm Wednesday and return 10pm on Friday.

## TRIP LEADERS/CONTACTS:

Farid Zoldjalali:  
Helmut Bock:  
Bruce Jahnke:  
Colin Knight:  
Rene Seco:

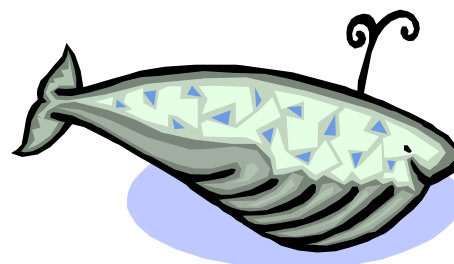
email: [farid.zoldjalali.1@aramco.com](mailto:farid.zoldjalali.1@aramco.com)  
email: [helmut.bock@aramco.com](mailto:helmut.bock@aramco.com)  
email: [bruce.jahnke@aramco.com](mailto:bruce.jahnke@aramco.com)  
email: [colin.knight@aramco.com](mailto:colin.knight@aramco.com)  
email: [reynaldo.seco@aramco.com](mailto:reynaldo.seco@aramco.com)

Tel: 873-6707/ 050-498-4166  
Tel: 872-5951/ 878-9727  
Tel: 878-6068  
Tel: 874-0726/ 878-1022  
Tel: 873-0547

## TANK FILL SCHEDULE



**TANK-FILL TIMES!**  
Opening April 3 till Sept 18  
From 4:30 - 5:00 pm  
Mondays at the Air Station



The DDA Air Station is Located behind the Third Street Pool - entry off Walnut Street. For the new 2006 Dive Season the Airstation will open on April 3 and operate until September 18.

The Air Station will be open every Monday from 4:30pm (16:30).

If you urgently require an air fill you can also contact one of the Air Station Directors (Rene Seco - 873-0547 or David Gruno - 874-5696) or one of the members on the **2006 Air Station Duty Roster** and make some private arrangements.

Mona Attas (Equipment Director) reported that we completed hydrostatic testing for all the DDA tanks and some DDA member's tanks (and they all passed). The following link explains the steps of a hydrostatic test along with pictures: <http://www.deep-six.com/page37.htm>

### Memberships Reminder

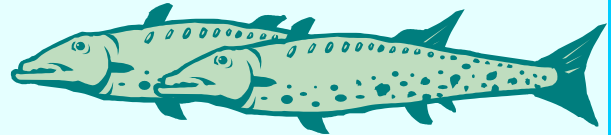
If anyone has not submitted their photos, completed the 2006 application form; with the liability waiver initialed and a copy of their most recent dive certification, please do so as soon as possible. Deb Nanninga would like to complete all of the cards and get them out. Then the database can be updated and completed.

Remember to visit our new DDA website:  
[www.dhahrandiving.com](http://www.dhahrandiving.com)



**"Clearwater" Editor, Sheryl Wright**

**Tel: 874-6107/ 878-2796, Box 10496 Dhahran,  
Email: [sheryl.wright@aramco.com](mailto:sheryl.wright@aramco.com)**



# DDA Photo & Video Contest



**Debbie Nanninga  
877-6108**

**Radi Adzemovic  
874-6022**

# Rules & . . . . .

- The Underwater Photography Contest is open to all DDA Members.
- Eligible photos may not have been published before and must be the contestants own work.
- No pool or aquarium shots will be accepted. Photos and Video must be taken of the fish, marine animal life or coral reefs in the **RED SEA** or **Arabian Gulf**.
- Photos will be judged by an appointed panel. All decisions will be final.



- Ownership and copyright of all entries remain with the photographer. We reserves the right to publish the winning photos without compensation for educational purposes, including, but not limited to publication on the DDA website, in brochures, educational campaigns, publications in articles regarding the Red Sea, publication for tourism or for future contest promotion. The winning photographs will also be printed and used as a traveling exhibit within the Kingdom of Saudi Arabia. Photos may also be used for a DDA Calendar. Proper credit will be given to all winners.
- Submitted photos will not be returned, so it is suggested that only duplicates be submitted.
- Contestants are limited to 3 entries per category.
- Please provide general information regarding the photo entry. i.e. location, depth, reef location, etc.
- Winners will be announced at the DDA November General Meeting and also posted in the DDA Clearwater News Letter and website.

## . . . . . Submissions

- To qualify for submission, all contestants must download and complete an application form from [www.dhahrandivers.com](http://www.dhahrandivers.com).
- Each contestant must use their badge number as a contestant number. This number must be used on all submission material.
- All photo entries must be 35mm slides, printed photos, or high resolution digital images. Printed images and Slides must be labeled individually with the contestant number and Category number only. Digital images must be named in the format : "ContestantNumber-CategoryNumber-PhotoNumber" e.g. 125-4-02 (Contestant 125, Wide angle, photo number 02)
- Video: Only one video may be entered per category. The video may be provided on DVD or VHS. It may be PAL, NTSC or HD. Should be no more than six minutes long, have a title and theme, and carry a narrative and/or music track. At least 65 percent of the video must have been shot underwater. Both tape, DVD and slipcase must be labeled with the contestants number and Category number.
- Images may be optimized (i.e. adjusted while maintaining the integrity of the image), but not altered such that an image does not reflect the actual subject matter.
- An additional printed copy of every submission with minimum size of 6x8 must be submitted for exhibition purposes.
- All submission material should be sent to: DDA Board Members or Deb Nanninga, Membership Director.