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ON BOLD LINKS



Kowabunga Equipment



Edited by
Arnold Weisz



Reactor Gamma

Reactor has re-issued it's Gamma timepiece. Now with a massive 45.5 mm diameter case for easy viewing, and a application of Superluminova for extreme low-light performance. Other key features include a 10-year power supply, 300 metres depth rating and an anti-reflective coated crystal for easy viewing under water and a unidirectional rotating timing bezel. Weight: 200 grams.
www.reactorwatch.com

VR Technology VR3

A brand new VR3 model for 2008 has been released, armed with High Definition (HD) software giving enhanced screen visibility and some exciting new options as standard. In addition to the existing features that VR3 owners have enjoyed to date, the new 2008 model also has amongst others: backlit white screen, PIN upgradeability from single colour to multi colour, a faster and more user-friendly screen navigation process, mini-screen pre-dive check feature, and user friendly new dive profile and look ahead graphic feature on the dive screen.
www.vr3.co.uk



Body Glove ECO

The ECO is made of stretch rubber and ECO Flex exterior. Both materials are non-petroleum based and 100% environmentally friendly. The combination of these two materials is the purest form of non-toxic stretch material on the planet. Not to mention the production of these eco-friendly materials only consumes 1/10th the amount of energy normally used in the manufacturing of standard petroleum based wetsuits. The Body Glove ECO men's fullsuit comes in 4/3 mm and 3/2 mm and the exterior is 100% ECO Flex throughout. All the graphics are printed with organic water ink, and the zipper on the exterior pocket key holder is made from recycled plastic. The Vaporlock seams minimize water seepage and the interior floodgate helps keep the rider dry.
www.bodyglove.com



HOLLIS Gear 212 Reg kit

Breathe with confidence knowing you have the peak of 30 years of regulator design experience in the 212 Regulator. The 212 2nd stage with Diaphragm Swivel first stage is designed to be the best in world performance. Patented Dynamic Adjustment once set automatically maintains inhalation effort throughout the dive by compensating for depth changes. The DC1 First Stage is designed to withstand the rigorous CE standard for coldwater performance. High performance over-balanced first stage provides progressively greater intermediate pressure as depth and gas density increases for superior gas delivery under the most extreme conditions. www.hollisgear.com



equipment



Apollo Bio-Metal Pro

The new mask comes with a polished stainless steel frame with ceramic coating to provide resistance to corrosion. Designed to easily accommodate optional LED light systems and Flip-up magnification lens. The volume is almost half that of the standard aluminum version. The result is a nearly 180 degree horizontal viewing area. The slight angle adjustment maximizes center and lower vision for 102 degree vertical field. Further features: push button strap adjustment and soft surgical silicone and twin-curved rim, and provides a comfortable face hugging seal. www.apollosportsusa.com



SeaCure custom made mouthpiece. The "Hi-Flow" version of SeaCURE Custom Mouthpiece replaces the previous "Sport" model.

It has been improved and offers an expanded port for increased air flow. It also includes a new one-piece molding and sealing attachment. This device allows for easier molding and is then used to protect the regulator from debris and unwelcome guests during storage. Available in three sizes. The mouthpiece fits most regulators on the market, except Apeks ATX and XTX and Poseidon.

www.seacure1.com



Divers' boost

This offer of a supplement for divers of an herbal blend which is said to help reduce congestion and improve respiratory function. It contains vitamin E to improve oxygen efficiency of the cardiovascular system. Vitamin B complex is claimed to improve oxygen carrying capacity of the circulatory system, and it is stated that the vitamin C help counteract the stress and ill effects of diving on the body and circulatory system. For more details on the product. www.diversboost.com

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Announcements

Beware of copycats

Not every t-shirt with an iQ-fish on it has the quality divers are used to seeing from iQ-Company. A big portion of the t-shirts with iQ-designs sold in Egypt are forged. Thus many divers have been disappointed by their cheap holiday purchases. "On one hand, it is a compliment, that people like our designs so much that they copy them. But on the other hand, the customer has the damage, because of the bad quality. Most people are not even aware that they are buying copies that do not comply with our level of quality. This is why we wanted to take action," explains

Markus Courtial, founder of iQ-Company. iQ company strategy is to be active on the Egyptian market. Especially the "iQ-Stores" in Hurghada (Sea Gull Mall), El Gouna, and Makaadi Bay do not sell original iQ-products, even though they look like the real thing. With immediate effect, original iQ-products can be purchased at selected shops and resorts along the Egyptian Red Sea coast. A list of all authorised stores can be viewed at www.iqcompany.com/egypt





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Where the Girls Are...

Text by Cindy Ross
GirlDiver.com

GirlDiver has taken over Mermaid Matters! We are pleased to introduce X-RAY MAG's new editor for issues and stories related to women and diving: Cindy Ross is a certified diving instructor specializing in scuba diving education for women and girls. She is the founder and director of GirlDiver.com and DiveForTheCure.com (an organization committed to raising awareness and funds for breast cancer research through national diving events in the U.S.). GirlDiver will appear as a regular column in X-RAY MAG. Please send your comments, suggestions for stories and inquiries to Cindy Ross at: cindy@girl-diver.com.

Gorgeous neoprene clad GirlDivers have long graced the covers of the scuba periodicals, gear catalogues and dive shop posters, but lately, there seems to be an increasing trend of GirlDivers actually showing up at the dive sites.

Women in scuba are some of the strongest, most confident women in the world. Our sport draws women who are willing to explore a part of the planet most will never see, in an environment not designed for human habitation. The gear is intensive, both in weight and storage considerations, as well as initial entry cost into the sport. To the women of scuba, it is but a small price to pay to be witness to the deeper arenas of life around the world.

According to PADI—the world's largest certification organization—the ratio of females to males in Open Water certification classes is on the rise. There is close to a 50/50 ratio in beginning classes. However, according to DEMA (Diving Equipment and Marketing Association), the "active" divers are still predominantly male (86 percent).

Coming into the pool, however, are women who want to make diving easier for other



Funky Fins—fun fins with creative imagination

women to actively stay with the sport, not just get certified. What does it take? Fun colors? Better fitting gear? A more zen-like experience in the underwater realm?

So where are the girls?

Here's a list of just a few of the females promoting the sport of scuba in a manner which encourages other women to come on board. Women dedicated to building our sport, not specifically for women, but simply in a softer

way, to encourage women to become more active with scuba and maybe introduce the boys to a different view under the waves.

GirlDiver

Seattle—Dedicated to promoting the sport of scuba for women of all ages, all over the globe. This site has articles created for women to help with everything from gear selection to dealing with the effects of the sea salts on hair. GirlDiver has a line of clothing and boutique items, with fresh, new inventory on the near horizon. Believing that proper training and education is what creates lifelong divers, the GirlDiver focus is on creating a fun environment with an emphasis on education.

With the goal of catering to the fast emerging female diving market, GirlDiver made the decision to bring a full line of gear into rental designed specifically for the female physique. The She Dives line from Mares was chosen as the official gear of GirlDiver. As the first head to toe scuba kit designed for women, by women, it matched the mission of GirlDiver. "Our clients are thrilled with the fit of the gear. A lot of women are intimidated by the gear considerations necessary for our cold water diving environment, but with the improved fit and function of gear designed for their shorter torsos, and allowing for some feminine curves, the fit of the gear is more comfortable right from the start. We find that with proper fitting gear in a gear intensive sport, the process of learning to dive has become much easier," says GirlDiver teammate Leigh Ann Boswell. www.girldiver.com

Funky Fins

UK—While on holiday, Michelle Lewis came up with a better design for fins. Funky Fins sport brilliant graphic designs that seem to float in the water. With Hibiscus and Water Droplets set on a warm water fin platform, these are



CORTNEY SOLAND

says you have to have neon yellow paddles on your feet anymore?
www.funkyfins.com

Miss Scuba

California—Szilvia Gogh has launched a new website providing an online dive travel resource just for women. Szilvia says she noticed divers in California are predominantly men, so she created a site with the help of her friends that allows women divers to interact with each other. On this website, scuba girls can find journeys, photos, travel tips and gear reviews coming from fellow scuba girls. Scuba Girls from over a dozen countries are profiled on this site. www.miss-scuba.com

Liquid Fit

Florida—This GirlDiver creates wetsuits that fit like they were POURED on you. In her quest to find a great fitting wetsuit for herself, a company was launched. She has helped handicapped divers, irregular shaped divers (what's regular anyway???) and specialty divers with the right suit...

the right fit. Carolyn Tomes, founder, says, "The first time I ever snorkeled, I knew I was hooked. I knew I had to get closer. I got into the wetsuit industry because I saw that there was

a great need for divers to have well-fitting suits, especially women divers. For many years, women divers have been forced to wear suits that were not anatomically correct. I have

always loved beautiful colors in all aspects of my life. Creating bright beautiful wetsuits has brought great joy to my life." www.liquidfit.com

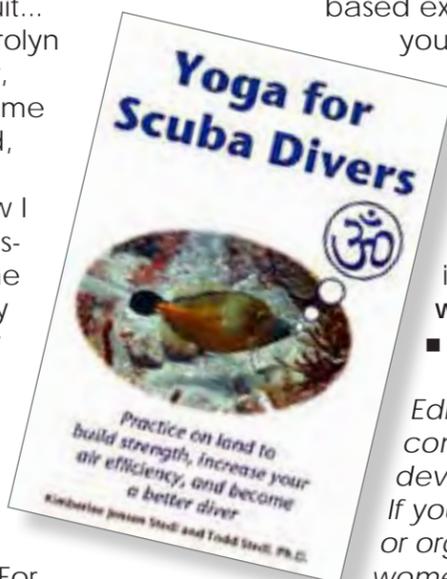
Diversitea

Texas—Janine Davis, an herbalist since 1989, blended her passion for diving and her expertise in herbal medicine in 2001 to support the health of fellow divers. This herbal tea blend containing molybdenum as its driving nutrient is reported to help divers not only with their hydration needs, but also with Nitrogen absorption in the blood stream. More information on testing methods can be found on her website. www.diversitea.com

Eighth Element Yoga

Seattle—Kimberlee Stedl has combined her passion for yoga with her love of diving to develop a series of exercises specifically designed to enhance diving. Her new book, *Yoga for Scuba Divers*, teaches the fundamental philosophies of yoga in relation to scuba, as well as land based exercises that will increase

your breath control and build the core muscle groups we use for hauling heavy tanks and carrying scuba gear over uneven terrain. They will be holding the first ever dive/yoga week in Dominica in early 2009. www.8thelementyoga.com



Editor's note: This is not a complete list of organizations devoted to women in diving. If you know of a dive business or organization committed to women and girls in diving or run by women divers, please forward the information to the editor at: cindy@girldiver.com



CORTNEY SOLAND

Equipment manufacturers, like Mares, are recognizing the fit and function necessary for female dive gear. It's more than just going pink

gracing the feet of female divers on all continents. But it's not just the look of the fin that the female divers love, it's the function. The foot pocket is comfortable, and the fin material allows the fin to be just flexible enough for comfort, while stiff enough to provide the quick acceleration you need underwater. Who

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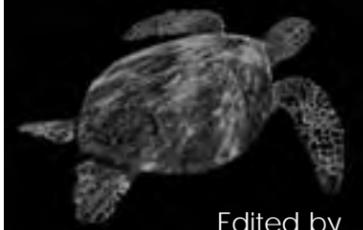
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Edited by
Peter Symes

About 600 out of a total of 1,115 sea turtles from south-east Sulawesi were caught at Wakatobi National Park.

Text and photos
by Kurt Amsler



We need your help

Sea turtles are being hunted in Wakatobi National Park

You can help stop it

The Indonesian archipelago is home to six out of the seven species of sea turtle that exists today. According to Indonesian law, sea turtles are protected nationwide, and the trade in both live animals or parts of them is forbidden. However, it is a public secret that these regulations have neither been adhered to, nor have violators been prosecuted. During the past decade, in Bali alone, 25,000 turtles have been slaughtered in the most brutal of ways, with the silent consent of the public as well as the police.

It was only following the fall of the Suharto Regime, that activists of **Profauna**—a national environmental and animal conservation organisation—has been able to intervene. Together with **SOS-Seaturtles** and other organisations, they have made the massacre public—a massacre of a species threatened with extinction. With the help of numerous publications all over the world, TV documentaries, petitions, letters of protest, media conferences, public announcements and various talks with government officials, regulations for the protection of sea turtles were finally being implemented. As a result, sudden regular police investigations against

hunting boats and dealers started to take place. Profauna activists were also able to build up an information network in order to be updated at all times about any movements in the turtle trade.

Initial successes

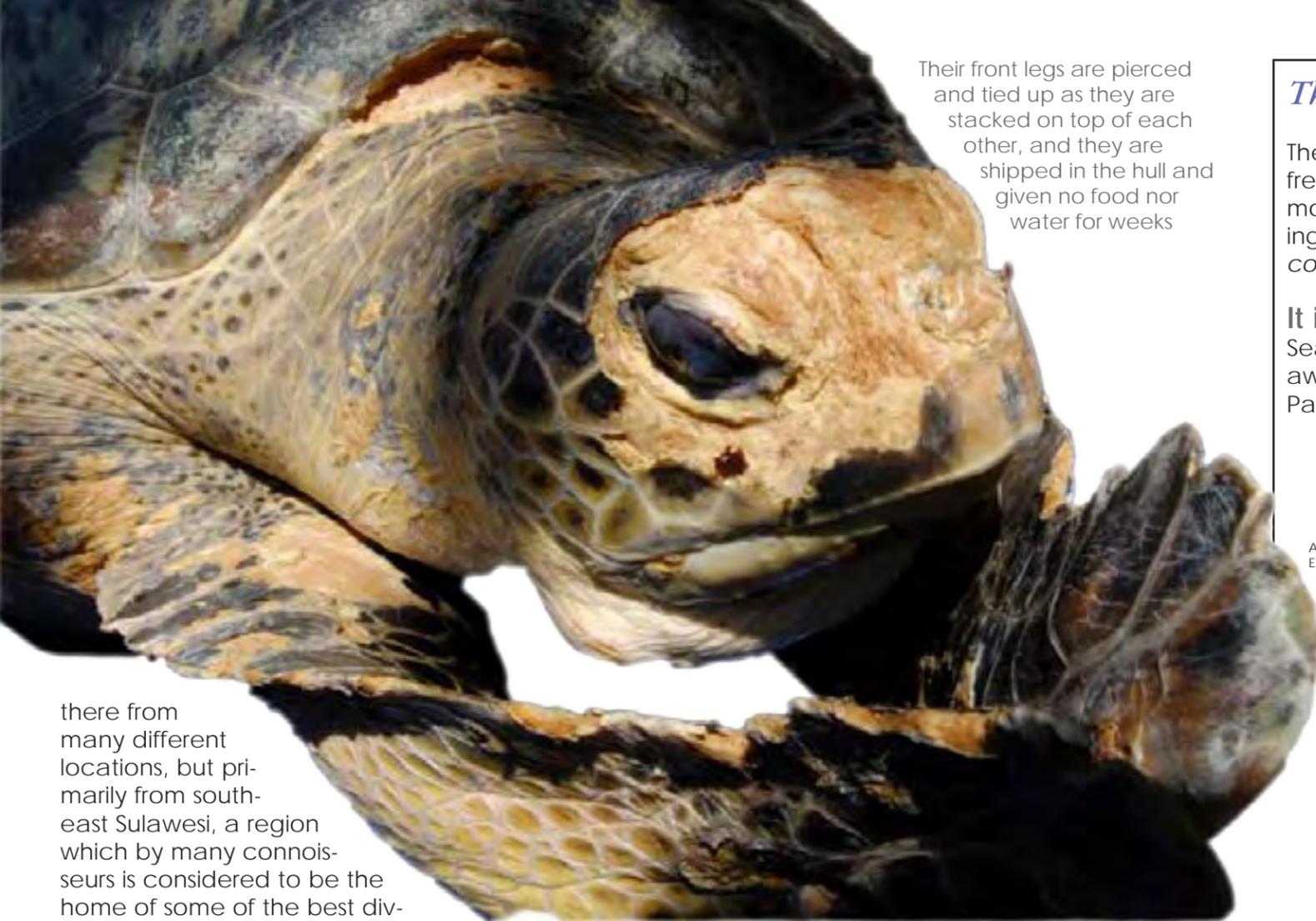
The good news is that it made a difference. The number of turtles killed within the past seven years has dropped from 25,000 to approximately 3,000 annually—a number that still continues to decrease. There hasn't been a public trade for a long time, although some trade has continued in private. Constant police patrols are now making the lives of poachers and dealers steadily more difficult. (Police reports can be found at www.sos-seaturtles.ch)

A battle is won, but not the war
It is, however, too early to speak of a victory against Bali's "turtle mafia" yet, but the achievements so far are impressive. However, the question remains whether it is the police or the poachers that will persevere. SOS-Seaturtles is going to provide continuous support to Profauna, as well as to Heinz von Holzen's "**Turtle Rescue Team**" wherever possible. We will also take care of photography and making documentaries on the spot.

Beauty is only skin-deep in Wakatobi national park
The turtles being processed in Bali have not been caught elsewhere simply because sea turtles don't exist around Bali anymore. They are being delivered



There is 1,000 km (640 miles) from Wakatobi National Park—where sea turtles are illegally hunted—to Bali, where they are landed. During this lengthy transport the turtles are stored below deck in squalid conditions with no food or water



Their front legs are pierced and tied up as they are stacked on top of each other, and they are shipped in the hull and given no food nor water for weeks

there from many different locations, but primarily from south-east Sulawesi, a region which by many connoisseurs is considered to be the home of some of the best diving in the world.

Long investigation

Profauna has been investigating the matter for many months and is now able to supply evidence with numbers and names of dealers. Detailed information can be found at www.sos-seaturtles.ch.

The area of Wakatobi is located between the Banda and Flores Sea and, at 1.39 million hectares, is the second largest national park in Indonesia. Sadly, the impression of tranquility that greets the visitors is misleading, because the park is where not only sea turtles, but also sharks, napoleonfish and jewfish are being caught for the Asian market. The problem is not lack of money—each tourist and diver has to pay a fee. The problem is corruption, bad or no centralised planning, lack of interest,

cultural disparity, bureaucracy and lack of motivation.

Cruelty

We are not only talking about the protection of a species, it is also a matter of animal welfare. These animals undergo unbelievable suffering when they are disembowelled alive!

The animals are being caught with nets, wires or harpoons, or captured when they come ashore to nest. Without food, they are put into small pools filled with brackish water, most of them not deep enough for them to cool down or get protection from the sun: Under these squalid conditions, they sometimes have to wait for months until a boat ships them to Bali. We have seen horrible injuries and skin lesions.

Legs are pierced

Their front legs are pierced and tied up, as they are stacked on top of each other, and they are shipped in the hull and given no food nor water for weeks. They are only put out of their misery when their lives come to a horrifying end in Bali.

Profauna and SOS-Seaturtles now want to put an end to the sea turtle trade once and for all. The point is to put pressure on authorities as well as organising activities for the public. These strategies worked very well on the island of Bali where the turtle trade decreased by 90 percent.

We urge the police to attend to their duties in south-east Sulawesi, especially in Wakatobi National Park. Profauna is going to use its contacts among high-ranked

This is how you can help

These campaigns and activities to free and protect the sea turtles cost money. You can help by donating. Every couple of dollar or Euros counts.

It is this easy Donating to SOS-Seaturtles is just a few mouse-clicks away. Click on this link to donate via PayPal or by credit card.



ALL PAYMENTS, ALSO BY CREDIT CARD, ARE PROCESSED ENTIRELY BY PAYPAL'S SECURE SYSTEMS. ALL PAYMENTS GO DIRECTLY TO THE NON-PROFIT ORGANISATION SOS-SEATURTLES. BY CLICKING THE BUTTON, YOU WILL BE TAKEN TO A DONATION PAGE UNDER PAYPAL'S WEBSITES.

Boat transporting turtles spotted by investigators in Benoa harbour, Bali. The other images speak for themselves. This meaningless slaughter and cruelty has to be stopped!

government officials. Meanwhile, SOS Seaturtles is going to act as the mouthpiece outside Indonesia to spread the word to media organisations throughout the world. This gives everyone the opportunity to take part and support petitions and protest letters worldwide.

You can help

Needless to say, all these campaigns and activities cost money. SOS-Seaturtles is a non-profit organisation and all donations (100 percent) will go to sea turtle conservation projects. Besides private donors, we have also been getting support from the dive and travel industries.

All supporters are acknowledged on the SOS-Seaturtles website www.seaturtles.ch.

—Kurt Amsler



Many, many divers, underwater photographers and filmmakers, when asked about the origin of their passion to go underwater, say that they were inspired by the films and books of Hans Hass. He must be a very remarkable person, interesting to listen to, not to mention, Dr Hass is the greatest celebrity in the diving world today. Is it possible to meet him, to talk?

I call. On the other end of the telephone line, I hear a very pleasant man's voice: "Interview? Oh, here, in Vienna... Yes, of course, but I am leaving for a week tomorrow." Deep in my mind, I bless the good fortune that I also planned to stay in Austria for some time, and we agree about our meeting.

Dr Hass was born in 1919. I know this fact and am enthusiastic about meeting him. He is the megastar in the diving research constellation. He gave thousands of interviews...

I wondered, would it will be interesting for him to tell his stories once more?

Text by Svetlana Murashkina
Photos courtesy of Michael Jung
at the Hans Hass Archive HIST.
Alexander Axenov and
Svetlana Murashkina

Hans

Hass *A talk with*



ALEXANDER AXENOV





Hans Hass talks with X-RAY MAG's editor, Svetlana Murashkina, at his office in Vienna

Hans Hass

there was great articulation.

The most frequent phrase in the Hass biography is "the first"—"the first to dive", "the first to research", "the first to apply..."

His fame in Europe and America and the whole world is great, but not widespread in Russia. Only one book, of the 25 by Hass, is published in Russia. His films were not shown. This was the case most likely because his pioneering research was made during WWII, and mostly before the 1960s. There were probably some other reasons as well. It's not fair.

That's why we are sitting here with Hans Hass, to listen... just dates, just thoughts, just ideas.

Interview with Dr Hass in his office in Vienna, 17 August 2007

Youth. "Let me go..." I am Viennese, my father was a lawyer, quite famous. My father went hunting, and we had hunting grounds just here, not very far from Vienna. We went there. And I also liked to fish at the Old Danube.

My mother was pretty. I loved my mother! She took me to France, so that I learned French. And when I was 18 and finished with my studies, my first studies, she said: "Now this summer, you go on your own to Paris," and in German they say it differently, "to cut off your horns".

I spent five days in Paris, and

then I went to Juan-les-Pins again, where we went always, and I fell in love with a very nice French girl... but she then decided that a French man was better (*Hass laughed*)... he knows better how to behave.

So, one morning, I went out to Cape Antibes and thought about my life.

The Turn. I was sitting at Eden Rock. In the cliffs, I was sitting and thinking about my future... and this nice girl... And suddenly something

happened to me that

changed my life completely. I saw a man swimming around. He was an American, Guy Gilpatric from *The*

Saturday Evening Post.

Here he was, the inventor of this new sport—spear fishing—with a long spear and small goggles, and so, I observed him.

I was very good in sports—diving. So, I joined him. And when I came back, I told many stories about the adventures I had, diving down to fish, and nobody believed me.

Then, I decided to make pictures to show everybody how it really was. So, I found a black smith, and he helped me to make a case, the first one for my photo camera. And already by the next year, I went on a little expedition with several friends of mine, four or six of them. We went to the Dalmatian coast, and we had a nice time. So, I wrote about all that in my first book.

I always liked to experiment.
— Hans Hass

The long awaited date, 17 August, comes. Dr Hass' office is situated in the center of Vienna. In the room, there are book shelves, a bureau with a green table cloth, a lot of books and albums, pictures and magazines.

Just before our meeting, the Russians had made the first dive expedition at the North Pole.

The achievement was still in the limelight of the world's media. Dr Hass was very interested in the story, and that's how our meeting began—not questions and answers, but just friendly conversation about current events.

Dr Hass just returned from Monaco with his Italian friends, so he apologised for the Italian words

that come first from his tongue here and there. (These Europeans, switching easily from one language to another...) We looked at the old picture books, and Dr Hass told me about his life. All the key points of his bright career are well known, but the details!

Very cordially, he spoke about Lotta Hass, his wife and partner. He

spoke about the fear that Cousteau and his companions had taken the idea of the oxygen breathing apparatus.

It was a great pleasure not just to talk, listen and converse with Dr Hass, but also to decode the interview (a very rare case). All the words and sounds were clear, nothing like "eee", "well", etc—



Hass with wife, Lotte—who also became an astute underwater photographer and diver—during the production of one of their underwater films in the 1950s

From spear fishing to making underwater pictures to the study of fish behavior...

I began spear fishing in 1937. But very soon, I changed to photography. It was very fascinating to photograph all these colorful fish, and to film, and study them. Then, I realized that if you want to find out what fish are, how they live, and what their behavior is, one must oneself behave like a fish-like creature. So, I invented the first underwater breathing

equipment, pure oxygen, and then, already in '39, I went to the Caribbean Sea with my friends, Jorg and Alfred.

We were the first to dive the coral reefs. In those days, nobody dared to go in the water, because everyone was afraid of sharks. And we soon found out that these sharks were—as every diver today knows—very interesting, beautiful animals, but not interested in human beings, with some very rare exceptions. And I loved it, and I still love the sharks today.

BIOGRAPHICAL TIMELINE

1919 January 23. Hans Hass (Hans Heinrich Romulus Hass) was born in Vienna (Austria) to the family of a well known attorney.

1937. Hans graduated from school and did his first trip to France without his parents. There he met Guy Gilpatric, and was grabbed by a strong passion for spear fishing. On return, he entered the Law Department of the University of Vienna.

1938. During the first expedition to Dalmatia, the first underwater photos were made with the assistance of a self-made underwater box. During the same period, Hans constructed an open diving helmet with an air pump.

1939. Expedition to the Caribbean, to Curacao and Bonaire (The Netherland Antilles Islands) with university friends, Alfred von Wurzian and Jörg Böhler. Publication of the first book, *Jagd unter Wasser mit Harpune und Kamera* (Hunting under the water with harpoon and camera).

1940. Beginning of the WWII made the three friends stay in Curacao longer than they had planned. They were away from home for nine months and managed to get back via the United States, China and Russia. After returning to Vienna, Hans, contrary to his father's wish, stopped his studies in law and went into biology and zoology. At that time, he realized the advantages of being a "fish among fish" when studying fishes and presented new research methods for marine sciences. Production of the first film, *Pirsch unter Wasser* (Stalking beneath the sea).

1941. Meeting with Hermann Stelzner, technical director of the Dräger company (Lubec, Germany). Together they modernized "Dräger-Gegenlunge", an oxygen rebreather, and made alterations to the breathing bag and the oxygen supply valve. The continuous flow regulator fitted to the Gegenlunge was replaced by a simple push-button valve, allowing the diver to manually admit oxygen to the breathing bag according to his varying consumption and to control his buoyancy. To produce an advantageous center of gravity in all swimming positions, the breathing bag was moved to the back. Hass replaced the original goggles he had been using up until this time, with a circular diving mask that enclosed the eyes and nose. The use of flippers turned the self-contained oxygen rebreather into a swimdiving apparatus, which Hass used constantly on all his expeditions from 1942 on. Publication of the book, *Unter Korallen und Haien* (Diving to Adventure).

1942. Expedition to Aegean Sea. On 12 June, Hass for the first time acted as a "swimdiver" (he swam underwater and did not walk like a heavy diver). It happened near a small Greek island, close to the western tip of Euböa Island. Production of the film, *Menschen unter Haien* (Man amongst sharks).

1943. Study of the immobile animalcule called "Reteporiden", which he began during this expedition, is regarded today as a milestone in marine biology research and the first marine biology project carried out with the swimdiving method.

1945. Hans Hass married Hannelore Schroth (their marriage lasted until 1949).

1946. The son, named also Hans, was born.

TOP TO BOTTOM: Hans Hass with underwater camera in 1938; Hass in action under the waves in 1939; INSET: Hass spearfishing with a wooden helmet in 1939





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Hans Hass

WWII. When we came back from the Caribbean (1940), the military found out that when I marched, my toes became absolutely black. So, they did not let me go.

I made hundreds of lectures in Germany, because I was not allowed to be with the army on the front lines. I was lucky to be able to make all these lectures, because I earned a lot of money through the lectures and was able to get enough money for my own ship, *Seeteufel* (The Sea Devil).

But after the war, the Russians took it. And now, we have found out that it is somewhere in Saint-Petersburg, not in the museum. It is standing somewhere, and everyone can see it. But we were not interested in getting it back; it's too small.

Lotte. After the war, I went to the Red Sea. I was the first to dive the Red Sea, and took Lotti, my future wife. We have now been married for 57 years, and we still feel very well with each other. The reason for the great success of our films was partly Lotti, because a woman underwater was more interesting. Lotta was not only very beautiful, but also brave. It is nice to have a mate for your life.

Now, I do not lecture, no, no. Lotti said, "Well, after all, you taught all those years... now it is time for family." We have a very nice daughter with two grandchildren. We take them always to Venice. We first go to Venice and then to the Greek islands... Lotta is happy now that I am with her more.

Money. I financed every bit of what I did. I never wanted to accept any money from the government or anybody. So, I



Hass shows the title page of *Jagd unter Wasser*, one of his many published books

started making money by selling fish—which I harpooned—to hotels. Then, I published my first book, *Hunting Underwater*.

After our expedition to the Red Sea, there came the film, *Red Sea Adventure*. That was our first world success. You can see that at the end, my diving was limited. But certainly after 1960, I was doing many films, because I had to make money for some time during my life.

Equipment.

The rebreather was such a

practical piece of equipment. But when the Cousteau team heard about it—they were thinking about the danger of pure oxygen—they said that after three minutes, I am dead.... Not at all. You can go 20 meters deep and stay an hour underwater.

The boat *Xarifa*. Now, I've seen my ship again. I spent a week in Monaco, on board *Xarifa*, I was hosted by Mr. Carlo Talio. I sold the boat to him over 50 years ago. Oh, it's so beautiful!

But imagine: he bought the ship,

ALEXANDER AVENOV

and for 50 years, he lived on the ship without using it! Is this not fantastic? I would not do that.

But I enjoyed so much to see my own ship again, and I mean, it hasn't changed much on deck... nothing. Certainly, in between, they had put a lot of money in it. It is now very luxurious, and I was staying there with Carlo Talio, and it was so much joy. So, we met again, and during the last week, we discussed his life, and my life.

Back to Umbria. In the beginning of the year, we went to a port in Sudan, and we went down to the *Umbria*—a very lovely ship, a tremendous wreck, tremendous wreck! From the time we first went there to now, it has changed quite a bit. It's overgrown with all these colors—it's like a fairy tale. It's as beautiful as ever.

It was little cold. It was February, and there was a strong wind, but it was only six days. We were invited on a very beautiful new ship for divers, and really, five days is very little. Every one of the five days I went diving with a lot of German divers going down and loved the sea... no, it hasn't changed. Not many people go diving there, as it is difficult to go—fortunately!

In the Egyptian part, there are so many hundreds of thousands of people, in many hotels. But the Red Sea is very beautiful. But you must go down for the details. You must not hurry, this is not important, but just sit down and watch what they all do, how they interact.

Evolution of human beings

Later, in 1960, my interest was not so much the sea anymore, but this mystery of our existence. What is behind it? What does it mean? I was interested in the evolution of man. I changed my life. And that was my *Energon Theory*. My first book. But nobody was happy now—they all wanted me to make more films about sharks, and all that. So, my scientific works became less interesting.

I think I have



made some advances, but today everyone wants new things and pleasure. In my importance... we must stop a little, stop, just stop.



Dr Hans Hass signs a photograph in his office in Vienna
LEFT: The 2007 DVD of Hass' underwater adventures during the 1950s

Concern

And only now, I try my last book. I am under the impression that we are in a very difficult time. And that the human—mankind—grows too fast, and they want too much. And it is very, very, very important

within the next 20 years, that they do not increase anymore.

It is so simple. What to do is just three things, three sentences. Every woman in this world is permitted two children, not more. If one of them dies under six years, she may have a third. And if she really wants more, and if she has money and

the ability to put into raising her child, she can have a fourth one, yes, because there are enough women who do not have children and do not want to have children. In this case, we would not increase anymore.

But that certainly is very difficult, because everyone wants more money, more pleasure, new things, new ideas, and more and more and more and more... But I shall give enough reasons, I hope, to help that change. I will do it. Whether I'm successful or not, I do not know. I do not mind, I am unimportant. I have to address myself to the females on Earth. But

1947. The first showing of the film, *Menschen unter Haien* (Man amongst sharks) took place, a production that began in 1942 by the Ufa-Kulturfilm studio. After The Second World War, Hans Hass turned to anthropology and evolutionary biology. He founded in Liechtenstein his International Institute for Submarine Research (IISF).

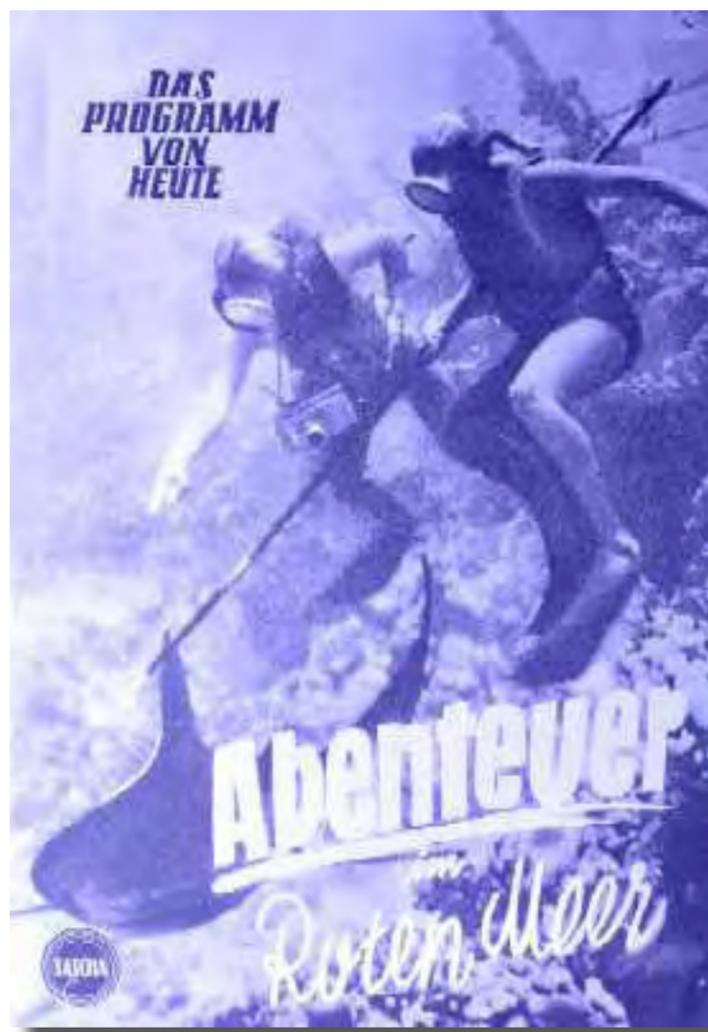
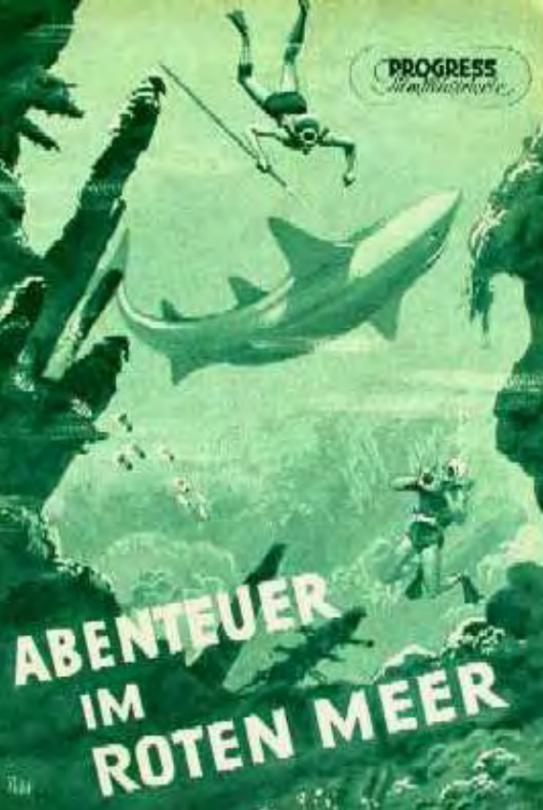
1948. *Xarifa*. Hans Hass acquired a three-masted schooner, hired a crew, gathered a team of scientists around him and set off, with himself as expeditionary leader, to explore the various oceanic coral reefs in great style.

1949. The book, *Menschen und Haie* (Men and Sharks), was published.

1950. Hans Hass married Lotte Baierl. She approached Dr Hass as his secretary and very soon became a competent member of the expedition and shooting team, a talented cameraman, and also the first charming and very brave underwater film star. The film, *Abenteuer im Roten Meer* (Adventure in the Red Sea), received first prize for long documentary films at the Venice Biennale.

1952. Publication of book, *Manta: Teufel im roten Meer* (Under the Red Sea).

1953-54. The *Xarifa* sailed across the Atlantic to the Caribbean Sea and the Galapagos Islands of the Pacific.



THIS PAGE: Just a few of the posters of the many pioneering underwater films starring Hans Hass and his wife Lotte

remember again, it's a very fair thing if you say to a woman, you have a right to two. That is quite a lot.

Oh, here it is not the problem anymore. But in the other parts of the world... It's so unfair to put children in the world without any bit of money, any thing... and if you go to Rio de Janeiro, there are 20,000-30,000 children running around trying to eat any food that they can find. It is unfair! I mean you must have the help of your father and your mother... and you must have enough food, and especially learn languages and learn other things. Only then, can you start to be a human being. So, I think, I should impress the women. And we need the women more now. Men are not important anymore. It is unimportant to go to outer space, why? Keep the money first, and get it good on the planet Earth.

Planet Earth has a certain size. But if we would stop—we've gone over six billion—then, after a while we can go back to five billion, and the ideal would be four. If we go back to four billion or so, there would be no poor people at all, and if they are not so solid, then the world could go on...for millions of years!

If not, I tell you, within 20 years or 30 or 40, we will destroy, the human being will destroy the whole evolution of life. Very simple. And there are lots of people, who have the same idea.

But what can we do with the politicians? The politicians are uninterested... Every single person on this earth, if there is no change, will go down in terrific wars.

We are happy, because we had so much success. But we are changing our wishes to want more and more and more.

Satisfaction. I have been in so many places, and the sea is so big. Half of the world is covered with seas, which have been unknown. I've done what I wanted, I've been every where in the world, and had much success. We went to the Galapagos Islands, Coco Island, the Red Sea and the Indian Ocean and to the Great Barrier Reef of Australia, and wherever I went, I had the luck to be the first. But I am careful, I go closely, and it went quite well, and I succeeded in interesting people very much in diving. In the beginning, people did not like the sea. It was dark, and there were dangerous things. Today, there are millions of divers everywhere in the world. And science is changing wherever you go. Now, all scientists go underwater. They are not afraid of sharks.

I've made many films, and I made many scientific works, and many lectures everywhere, even in Japan you will meet a lot of people who have heard about me and my first expeditions. ■

1957. Lotte Hass gave birth to their daughter, Meta. Publication of the book, *Wir kommen aus dem Meer* (We come from the Sea).

1957-58. Hans Hass sailed through the Red Sea into the Indian Ocean to the Nicobar Islands and, finally, to Singapore. During these expeditions, many exciting events took place, sensational data obtained, lots of research work done. For example, the first encounter of man and sperm whale under the water. Also, the new theory of the origin of the Maldives atolls was proposed.

1959. After African and Asian expeditions, new TV serials appeared (about 100 TV programs were created all in all). The film, *Unternehmen Xarifa* (Under the Caribbean), was awarded the "Underwater Oscar" from the Underwater Photographic Society for outstanding underwater cinematography.

1963-1966. Beginning of the Energon theory development.

1968. Monograph, *Wir Menschen. Das Geheimnis unseres Verhaltens* (Men: The mystery of our behavior).

1970. Monograph, *Energon: Das verborgene Geheimnis* (Energon: The hidden mystery).

1977. Hans Hass became a professor at the University of Vienna.

1983. He continues to do research, lecturing, and other educational activities on the theme that interests him most of all, "The instinct of a predator in professional life", where marine biology, human behavior and management theory are connected. The Energon theory was not accepted by Academic science and was declared "pseudo-scientific".

1988. Monograph, *Der Hai im Management. Instinkte steuern und kontrollieren* (Business shark. Instinct control).

1999. Dr Hass is awarded the Konrad-Lorenz-Preis by the Ministry for Environment of Austria.

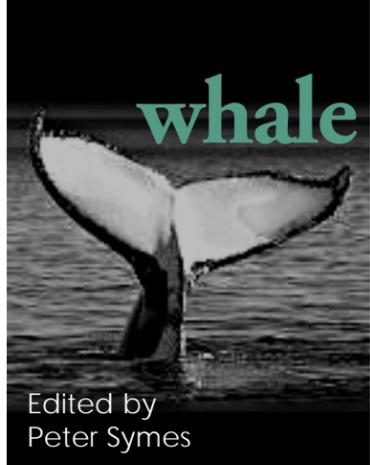
2000. On 1 December, the Hans-Hass-Institut für Submarine Forschung und Tauchtechnik (the Institute for Underwater Research and Diving Technology by Hans Hass) was created as a non-profit organization, originating from an amalgamation of the Hass Institute (IISF, 1947) with the Research Centre for Diving History (Forschungsstelle fuer Tauchgeschichte, FTG, 1995).

2004. Publication of the book, *Erinnerungen und Abenteuer* (Reminiscences and adventures).

2005. In January, Hans Hass dived the Maldives to witness tsunami consequences.

2007. In January, the trip to Port Sudan was held, devoted to the 50 years of *Xarifa* journeys and diving the *Umbria* wreck. In November, Dr Hass addresses us with "The letter to the women of the world". http://www.hans-hass.de/Englisch/index_english.htm

2008. On 23 January, Dr Hass celebrated his 89th birthday, he received phone calls from all over the world. Today, Dr Hass together with his wife, live in the center of Vienna. Hans and Lotta keep traveling and visiting important dive events. ■



whale tales

Edited by Peter Symes



NOAA

The population of the humpback whales is up to nearly 20,000 animals in the Pacific after hitting a low of 1,400 in 1966. A 1996 ban on hunting the mammals, as well as other conservation efforts, have contributed to their rebound.

Back in business; Humpbacks rebound

The number of humpback whales in the North Pacific Ocean has increased since international and federal protections were enacted in the 1960s and 70s, according to a new study funded primarily by NOAA and conducted by more than 400 whale researchers throughout the Pacific region.

However, some isolated populations of humpbacks, especially those in the Western Pacific Ocean, have not recovered at the same rate and still suffer low numbers.

The new research reveals that the overall population of humpbacks has rebounded to approximately 18,000 to 20,000 animals. The population of humpback whales in the North Pacific, at least half of whom migrate between Alaska and Hawaii, numbered less than 1,500 in 1966 when international whaling for this species was banned. In the 1970s, federal laws including the Marine Mammal Protection Act and the Endangered Species Act provided additional protection. ■

Right whales got their safe zone ...at last

Since June 1 endangered right whales have a new safe haven near Canadian shores. Ships have been asked to make a detour around a 3,000 km² area, about 64 km south of Cape Sable Island, Nova Scotia.

The area has been declared an "area to be avoided" by the International Maritime Organization in a move to protect pods of right whales that congregate there from June to September. The designation requires ships to voluntarily avoid the area. Hunted to the brink of extinction during the last century, the right whale continues to be under threat from being struck and killed by a ship. The faster the ship is travelling, the more likely the whale will die.

Initial successes

"In the first four days (since implementation of new policy), we've seen evidence of vessels complying," says Angelia Vanderlaan, a doctoral candidate studying biological oceanography at Dalhousie University. "Since this is new, and it is a voluntary measure, I'm hoping it will work."

In her office at Dalhousie, Vanderlaan can track movements of ships on her computer via specialized tracking equipment installed on cell towers near Cape Sable Island. On June 1st, for example, about 20 vessels travelled through the Roseway region, a thoroughfare for ships from Halifax to New York. Sixteen of those ships avoided the area, and another four could have, but didn't and went right through. On June 3 and June 4, tracking

revealed that some vessels clearly modified their routes to avoid going through the area. "I think it will take some time to get through the system," she says. "We think it will make a big difference; it certainly helped when the shipping lanes were shifted in the Bay of Fundy."

Why don't the whales just get out of the way?

Vanderlaan says while the whales likely hear ship traffic, they're so used to the noise, it doesn't serve as a warning. At one time, for example, researchers experimented by broadcasting alerts to the whales, but instead of scaring them away, it brought them to the surface where there was a greater likelihood of a collision. A collision with a ship's propellers can shear off a whale's tail, slice them apart, or cause huge contusions. "It's like living beside a train track," she says. "After a while, you stop hearing the trains go by."

White House stone-walls efforts in the US

There is also a proposal to create an area to be avoided in the Great South Channel, near Cape Cod in the US. Vanderlaan says while the changes they've proposed have been supported and embraced by Canadian companies, similar efforts in the US by the National Oceanic and Atmospheric Administration to impose seasonal speed restrictions in areas frequented by whales have been stonewalled by

the White House. The rule has been awaiting clearance at the White House Office of Information and Regulatory Affairs since February 2007.

Hydrophones help scientists pinpoint, protect Right whales

Researchers at the Cornell Bioacoustics Research Laboratory and Woods Hole Oceanographic Institute have teamed up to use hydrophones to protect endangered whales off the coast of Massachusetts.

"We think it will make a big difference; it certainly helped when the shipping lanes were shifted in the Bay of Fundy."

Using ten microphones attached by a stretchy data cable to buoys at the surface and special software that picks out the acoustic signature of right whales, the scientists are able to detect the slow-moving

marine mammals. When a hydrophone hears a whale, it makes a cell or satellite call to researchers who contact

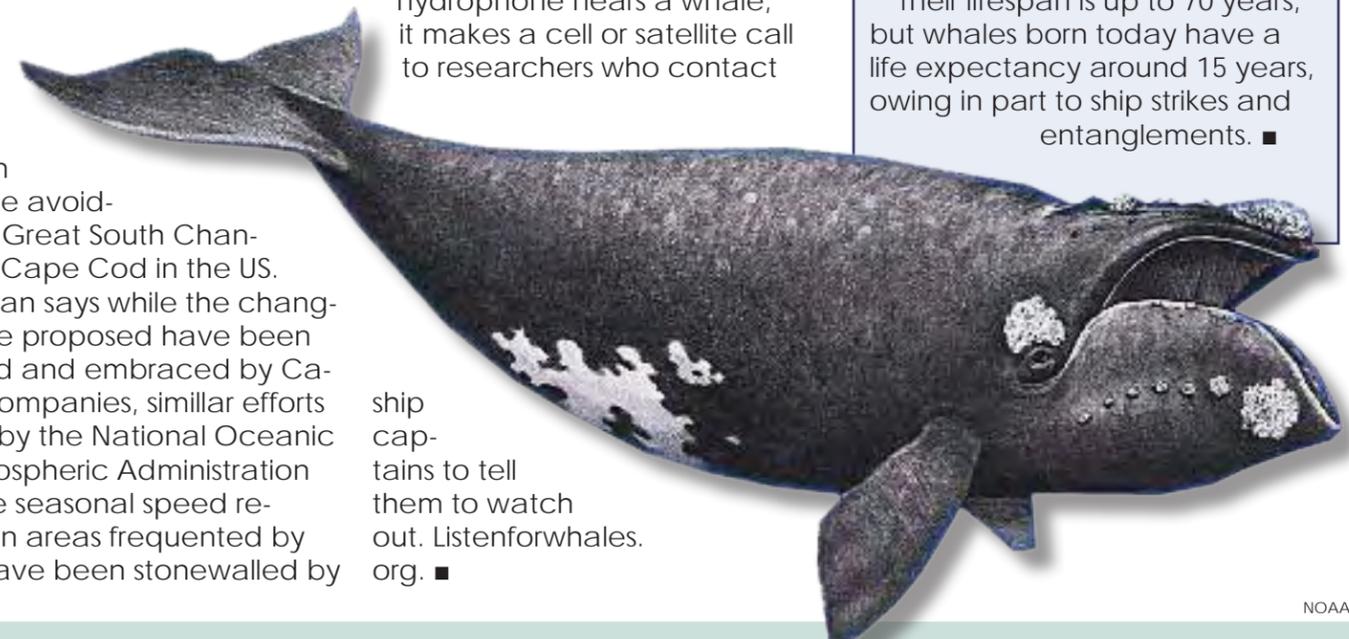
ship captains to tell them to watch out. Listenforwhales.org. ■

The North Atlantic right whale is a large, mostly black, whale with whitish patches on the head and belly, no dorsal fin, and a graceful, deeply notched "fluke," or tail. Two blowholes on the top of its head give a distinctive V-shape to a right whale's spout.

Whalers called the right whale – the "right" whale to kill because they were relatively easy to pursue, and their thick layer of valuable blubber kept the dead whale conveniently afloat.

There may be only 350 of these right whales left in the Atlantic Ocean. Without measures to protect and grow their numbers, they could be extinct by 2020, and the now protected area is a crucial habitat for the endangered whales. Once a year, pregnant females and a few other members of the population migrate south along the coast to Georgia and Florida. There the females give birth to calves that are 10-15 feet long and weigh around 1.5 tons. Calves drink mother's milk for 8 to 17 months after they are born.

Their lifespan is up to 70 years, but whales born today have a life expectancy around 15 years, owing in part to ship strikes and entanglements. ■



NOAA

Whale scam could mean the end of Japanese whaling

A Japanese public prosecutor announced on 19 May that it was launching an investigation into allegations that workers on whaling ships are embezzling whale meat and selling it to restaurant owners. The formal investigation follows on an undercover investigation by Greenpeace, which revealed the alleged embezzlement and

misuse of public funds.

Stake outs, testimony from informers, hidden cameras and tailing trucks full of stolen goods... it sounds like elements taken out of a blockbuster movie plot, but that was all part of a four month investigation by the Greenpeace activists in Japan, who cracked open a major conspiracy of

corruption at the heart of Japan's government-backed, sham scientific whaling operation.

Greenpeace displayed a cardboard box filled with the best cuts of whale meat, smuggled ashore by the crew of the Japanese whaling factory ship, *Nisshin Maru*, for illegal trade and personal gain,

at the Japanese taxpayer's expense. The box, along with videotaped testimony and other evidence, suggest widespread embezzlement of whale meat has been occurring for decades under the noses of the public officials who run the whaling program, and are allowing it to happen. ■

Narwhals More at Risk to Arctic Warming Than Polar Bears

Unless something is done, climate change will claim the narwhal as one of its victims. The medium-sized whale with the long spiral tusk was named the most sensitive (and thus vulnerable) to climatic change, in a listing of 11 Arctic sea mammals—even more than the polar bear.

The listing, published in volume 18 of Ecological Applications, took into account factors like population size, distribution, habitat specificity, diet diversity and the species' ability to cope with sea ice changes. It was determined that the narwhal would be the least adaptable and the least able to withstand climatic change. The polar bear and the hooded seal came in second and third respectively.

"What we wanted to do was look at the whole picture because there's been a lot of attention on polar bears," explained

study co-author, Ian Stirling, an adjunct professor in the Department of Biological Sciences at the University of Alberta and one of the world's foremost polar bear researchers. "We're talking about a whole ecosystem. We're talking about several different species that use ice extensively and are very vulnerable," he added.

Although there are about 20,000 polar bears left—compared to narwhal numbers of 50,000 to 80,000—the narwhal was determined to be more at threat because its diet, habitat and distribution were more specific. It had evolved to live in parts of the Arctic, which are 99 percent ice, and feeds on Greenland halibut. And when climatic change causes the icy

habitat to melt, it would be even more at risk from predators like killer whales.

"Since it's so restricted to the migration routes it takes, it's restricted to what it eats, it makes it more vulnerable to the loss of those things," said Kristin Laidre, a research scientist at the University of Washington.

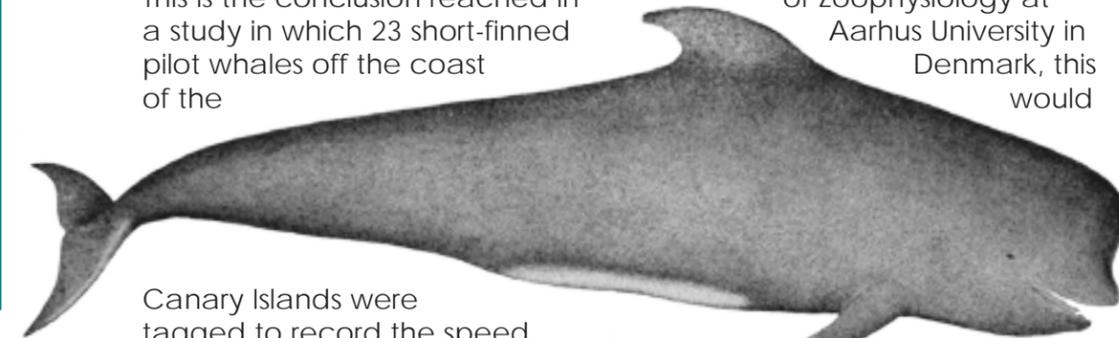
Also concerned about the narwhal's survival was Stanford University biologist, Terry Root. She is concerned that the species would be one of the first to go extinct due to climatic change, reiterating that "there could be a bazillion of them, but if the habitat or the things they need are not going to be around, they're not going to make it." ■



Pilot whales are sprinters

Short-finned pilot whales are the sprinters of deep-diving mammals. This is the conclusion reached in a study in which 23 short-finned pilot whales off the coast of the

Canary Islands were tagged to record the speed, depth and direction of their dives, as well as the sounds they made. According to Peter T. Madsen, Associate Professor of Zoophysiology at Aarhus University in Denmark, this would allow them to 'see' their surroundings in much greater detail. This could mean that the whales were hunting at this point. "It would seem that for whales using sonar, the deep sea is like a plain, but for other animals, the dark water is like a jungle. If this is true, it is a unique combination of both environments rolled into one," said Soto. A possible prey is the giant squid. In fact, Soto's colleague, Pablo Aspas, recently took a photo of a pilot whale half-breaching with a giant squid in its mouth. In addition, body parts of the giant squid have been found in the vicinity of the pilot whale's habitat. "We have imagined battles between sperm whale and giant squid. But it may turn out that it is pilot whales, one-third the size of sperm whales, which are sprinting for the giant squid!" quipped Soto. Commenting on the study, Patrick Miller, a marine biologist at St Andrew's University in Scotland, said, "This is an important finding that reveals a previously undescribed foraging strategy in a deep-diving whale." ■



Canary Islands were tagged to record the speed, depth and direction of their dives, as well as the sounds they made.

The tagged whales took just 15 minutes to dive to 800 to 1,000 metres (0.5 to 0.62 miles). What's more, they can chase after prey at an amazing nine metres per second, maintaining this speed for as long as 200 metres.

"As far as we know, no other whale has been recorded to swim nearly as fast at depth," said Natacha Aguilar Soto, a marine biologist at the University of La Laguna in Tenerife, Spain.

She added, "It was completely unexpected that short-finned pilot whales sprint at depth with limited oxygen reserves."

This hunting strategy is similar to that of the cheetah, which catches their prey after high-speed, energetically expensive sprints. However, unlike the cheetah, the short-finned pilot whale does this while holding its breath, and in the total darkness of the deep ocean.

The tags also reveal that once the whales reached the deepest point of their dives, they changed from using slow echo-location clicks to a fast series

NOAA



“We expected to see these populations begin their recovery years ago, because fishermen have been so successful at reducing dolphin deaths.”

The Eastern Spinner Dolphin is distinguished by its triangular dorsal fin and uniform gray colour.

Pacific Ocean Dolphin Populations Improving

The numbers of northeastern offshore spotted and eastern spinner dolphins in the eastern tropical Pacific Ocean are increasing after being severely depleted because of accidental death in the tuna purse-seine fishery between 1960 and 1990, according to biologists from NOAA's Fisheries Service.

“These estimates are encouraging because they are consistent with what we would expect to see if these stocks

are recovering, now that reported fishery mortality has been dramatically reduced,” said Dr Lisa Ballance, director of NOAA's Southwest Fisheries Science Center protected resources division. “However, we have to be careful not to jump to final conclusions. We need to resolve the uncertainties around these estimates before we can definitively say these stocks are recovering.”

Between 1960 and 1990, the northeastern offshore spotted and eastern spinner dolphin populations dropped to 20 percent and 30 percent, respectively, of their pre-fishery levels when dolphins

were caught and died in tuna purse-seine nets. Since the early 1990s, however, the number of reported dolphin deaths has been very low because of severe restrictions on the fishery.

“We expected to see these populations begin their recovery years ago, because fishermen have been so successful at reducing dolphin deaths,” said Tim Gerrodette of NOAA's Fisheries Service. “The new data are the first to indicate the beginning of a recovery, but these initial indications are not enough to be confident that the populations will continue to grow.” ■

Whales are more worth alive than dead

A new report commissioned by the Australian government shows that whales are worth more to the world alive than dead

Australian Environment Minister Peter Garrett used the inaugural National Whale Day to launch a progress report on the government-commissioned Global Cetaceans Snapshot. The report, which

will be used to bolster the case for conservation at the upcoming meeting of the International Whaling Commission (IWC), outlines the economic benefits of whale watching, summarises the global conservation status of whales and dolphins, and lists the main threats to their survival.

The report found that visitors to whale-watching areas in high-income countries were

spending AUS \$1.5bn per year by 1998, with the figure forecast to grow by \$3 to \$4bn a year over the next 20 years. The number of whale-watching visitors was also expected to increase by 10 million a year. Garrett said he would be taking the report to the next meeting of the IWC, to be held in Chile on June 23.

“Critically this progress report shows that what we've been saying about the argu-

ments for whale conservation is strongly grounded in science. We don't think that scientific whaling is scientific. What we do say is that we need to increase our collaborative research with other countries, non-lethal research on whales, and recognise that whale-watching, as an economic activity, is a sustainable business for us, not only here in Australia but right around the world,” he said in Sydney. ■

Prehistoric whales got the bends

The ancestors of modern whales had an interesting medical problem – some of them suffered from decompression sickness. Evidence of this has been found in several different whale fossils examined by a team of paleobiologists recently.

Of course, it would have been natural for the ancient whales to suffer from the bends, way back in those prehistoric times when they first started diving deeper into the oceans. With time, they evolved and adapted, and decompression syndrome was no longer a big problem.

However, it seems that not all whales developed this ability at the same time. The toothed whales, which comprises orcas and sperm whales, conquered the condition very early in their evolution, as shown by the signs of the condition being

Westbury, US, examined 331 modern and 996 ancient fossil whales, using x-rays and fluoroscopy. Of these, only a handful of the 996 ancient fossil whales showed evidence of decompression syndrome.

“Maybe baleen whales and tooth whales independently arrived at the same conclusion — that going out into the open water and going deep was a good idea,” said Beatty.

Today, modern whales have developed adaptations to counter — or at least manage — the problem, which appears to be a natural part of a whale's life. Some whales exhale right before diving, so that their lungs do not have any nitrogen gas. Others allow sufficient time to pass between dives. However, there have been cases in which the bones of some sperm whales showed evidence — more than usual — of the bends, and this is sometimes believed to be due to sonar signals or submarine activity. Whether or not this is true remains to be seen.



Artists' impression of an early whale hunting

found only on the very ancient specimens. On the other hand, evidence of decompression syndrome were found on more recent baleen whale fossils, suggesting that their defences only developed much later.

These findings were uncovered after the team, led by Brian Beatty of New York College of Osteopathic Medicine in Old

Meanwhile, the research continues. Said Nick Pyenson, a paleontologist at the University of California, Berkeley; “Tagging modern whales as they dive will help researchers understand how their ancestors evolved to cope. As our sampling of living species gets better, these data will better inform our expectations of what to find in the fossil record.” ■

BRIAN CHOO / MUSEUM VICTORIA





Black, red and pink corals have been prized as jewelry for 5,000 years. Corals are actually living organisms which are being taken from the sea to satisfy the vanity of a few but wealthy individuals. This is a billion dollar industry.



The exploitation of corals has depleted stocks all over the world. This is not only destroying the sea-floor, but has a much wider impact. Corals are more valuable if they stay in the oceans rather than around someone's neck. Coral reefs support more than 25 percent of all known marine fish species. As one of the most complex ecosystems on the planet, coral reefs are home to more than 4,000 different species of fish, and almost 5,000 species of corals, in addition to thousands of other plants and animals. Scientists estimate that coral reefs provide an economic benefit of US\$ 375 billion each year to millions of people around the world. Besides from indirectly feeding people, corals also offer cures for illnesses. Add to that that coral reefs protect our coastlines.

Wealth creates demand

The United States is the largest importer of coral reef species for food, jewelry and aquariums.

The US accounts for approximately 60 percent of the world demand for live reef ornamental products, about 70-90 percent of the live coral, and 95 percent of the live rock (rock with coralline algae growing on it). Seaweb estimates the trade to be increasing between 10 percent and 20 percent per year. It's not only the US that buy coral products. In Europe, this kind of artefacts are gaining popularity, as the populations gets wealthier. Not long ago, British media reported that hundreds of rare corals protected by international conservation laws had been intercepted at airports en route to aquarium shops in Britain. Raw coral commands an auction price ranging from US \$150 to \$900 per kilogram. Necklaces made of the red and pink corals, collectively known as Corallium, can cost up to US\$ 20,000.

A quick search on "red corals" on Google revealed a thriving industry for

coral jewelry. And their sales pitches are second to none. At one website you could read this: "Neptune's Gift. The coral is a mysterious gem with magical powers attributed to it. The Indians believe wearing a Coral will ward off the negative effects . . . the red firestone will help protect them from evil. Even Greeks and the



Text by Arnold Weisz

Corals for sale





Ban on trade hampered

After 5,000 years of trade in red and pink corals prized as jewelry, an attempt to restrict the trade to try to help the species recover after drastic over-exploitation was launched by USA.

Romans have used this stone to adorn rings, caskets, tiaras, etc. Since the sixth century, corals have fascinated humankind with their passionate red color." Precious corals have been used for the fabrication of items of jewellery and decoration since antiquity. Along with amber, precious coral may have also been used as currency for trade by Paleolithic man.

On June 15, 2007, at a United Nations wildlife conference, the Convention on International Trade in Endangered Species (CITES), they actually agreed on trade restrictions. "Corallium, the most valuable of the precious corals, has been fished for over 5,000 years," the US proposal said, adding that millions of items and thousands of kilos a year were traded internationally. The proposal initial-

ly passed on Wednesday, with 62 countries voting in support of the listing. Later the same day whole trade agreement went down the drains. Delegates voted by secret ballot to overturn their initial decision to list these overfished species under the CITES, following a massive lobbying effort by the coral industry and some exporting countries. Environmental organizations were very disappointed over this sudden turn in events.

- There are no international trade controls in place, nor any consistent management plan, TRAFFIC and WWF say.

Opponents to the red coral proposal, amongst others are Japan, a major red coral trading nation, and the industry group Assocoral.



- We started 800 years ago and we want to continue. We are not an industry; this is our tradition, our culture. Coral is our life, said Ciro Conditto of Assocoral, a lobbying group representing the craftsmen in the Mediterranean town Torre del Greco.

Coral in the red

The red coral trade is the most valuable and largest in volume with an estimated 30-50 metric tons per year. Seven red coral species are traded worldwide as jewelry and other decorative products. Many other species of coral are

already protected by CITES. Since deepwater reefs are not visible to the general public, dissemination of information through the media and the education system is vital in order to create empathy for their protection. This will not be an easy task, as coral fisheries

remain extremely important in the Mediterranean Sea, with annual harvests in the last years ranging between 22 and 28 tonnes according to official data from the FAO. Captured both dragging the bottom with a wooden cross provided with rope mops and by diving. The total catch reported for this species to FAO for 1999 was 26,5 t. The countries with the largest catches were Spain 6,9 t and Italy 3,9 t.

For more info on the topic:
www.tooprecioustowear.org
www.seaweb.org
www.traffic.org
www.assocoral.it ■