Search

SPONSOR 2012 CONGRESS PHOTO GALLERY **EXHIBIT** YOUR HOST ABOUT IAC

# 9 - 14 September 2012, Cape Town View presentation abstracts All the latest updates

Home » Host » Two Oceans Aquarium

# Two Oceans Aquarium

International Aquarium Congress

ABSTRACTS

**NEWS** 

# History & general

For many years the people of Cape Town yearned for a new, modern aquarium that would give them a window into the wonders of the two mighty oceans that meet at the southern tip of Africa.

However, nothing came of this until two brothers decided to turn the dream into reality. The brothers' enthusiasm

attracted like-minded individuals and soon there was a small group of highly motivated people scouting for possible funders. For several years their endeavours bore no fruit, but their perseverance finally paid off and, in 1994, Transnet Pension Fund and Norwich Life SA (now Investec Bank) became partners in the Two Oceans Aquarium.

A team of architects and planners travelled the world and visited leading aquariums. They returned to Cape Town with ideas for an aquarium to be built in the Victoria & Alfred Waterfront. At that time, Monterey Bay Aquarium was considered to be the best in the world and the team incorporated many of its design features into our facility. In terms of overall visitor experience, the result was one of the finest aquarium designs ever

The Two Oceans Aquarium opened in November 1995. Though it is not the largest aquarium in the world, its ambience is magical, its exhibits are beautiful and its staff and volunteers are friendly, enthusiastic and dedicated. Within a few years of opening, people around the globe were talking about us and we became a "must-see" destination in Cape Town.

The Aquarium was built on three cornerstones: excellent exhibits, innovative education programmes and meaningful conservation initiatives.

To date, the Two Oceans Aquarium has received more than 5-million visitors and excelled in the education arena. We can be justly proud of our achievements, considering that, in 2007/08, we taught 36 600 pupils in our classrooms; visited 17 000 pupils with our Oceans in Motion outreach programme; received more than 10 000 school children on self-guided tours and gave courses to thousands of teachers, technikon and university students, matriculants and "young biologists".

There is no doubt that we contribute significantly to the upliftment of our communities and that we play a pivotal role in helping the National Department of Education achieve its goals in environmental education in the region.

We also conduct exciting work in the fields of conservation and research. Our endeavours with ocean



VISIT YOUR HOST THE TWO OCEANS AQUARIUM

Cape Town International **Convention Centre** Cape Town, South Africa

**REGISTER** 

#### **SUBSCRIBE**

SUBSCRIBE

#### **DID YOU KNOW**

The IAC is held every four years and it gathers professionals from public aquariums all around the world to share and learn about new developments in research, technology, management and other related issues for the industry.

sunfishes, finfish culture and, most recently, shark conservation have caught the attention of local and international scientists, resulting in some fascinating collaborative work.

Since opening, we have evolved into one of the most attractive aquariums in the world and a valuable asset to both the Victoria & Alfred Waterfront and the City of Cape Town.

#### Some of our more notable events

#### 1995

The City of Cape Town, the original maritime gateway to Southern Africa, is an obvious site for a world-class aquarium. Few places in the world are in a more favourable position to feature the rich diversity of life found in two oceans, particularly in such contrasting oceans as the Indian and Atlantic. After eight years of research and 18 months of construction, the long-awaited Two Oceans Aquarium opens on 13 November 1995.

Longfin tuna (Thunnus alalunga) and snoek (Thyrsites atun) are displayed for the first time in the world.

#### 1996

The Minister of Trade and Industry, Trevor Manuel, officially opens the Two Oceans Aquarium on 10 February 1996.

#### 1997

Professor Kader Asmal, the Minister of Water Affairs and Forestry, opens the Old Mutual Environmental Education Centre. The Centre has been upgraded over the years and now boasts two fully equipped wet laboratories

In recognition of fishing company Irvin & Johnson's continuing contribution to the upkeep of the animals in the Aquarium, the largest exhibit, the *Open Ocean Exhibit*, is renamed the *I&J Predator Exhibit*.

The Aquarium's Adventure Dive Programme is launched – sport divers take the plunge with our ragged-tooth sharks, turtles, rays and fishes in the *I&J Predator Exhibit*.

#### 1998

The *Alpha* (now *AfriSam*) *Activity Centre* in the *Lower Seal Gallery* is officially opened by the Minister of Environmental Affairs and Tourism, Pallo Jordan, on 11 June 1998.

On 2 December 1998 the Strategic Fuel Fund (SFF) Sunfish Rehabilitation Centre opens. This facility provides an ideal opportunity to help ocean sunfishes in distress and to gain much needed knowledge about these mysterious fishes.



The I&J Predator Exhibit

#### 1999

The Aquarium opens its first large-scale temporary exhibit, *Fangs*, which features a global collection of writhing eels and slithery sea creatures, including deadly sea snakes. A themed experiential attraction reveals the *Guardians of the Lost Oceans*.

 $The \textit{Fangs} \ \text{marketing and advertising campaign claims the annual Marketing Organisation of the Year Award,} \\ presented by the Institute of Marketing Management.$ 

#### 2000

With generous sponsorship from BoE Limited, visitors to the Aquarium are given the opportunity to appreciate the vast size of southern right whales (*Balaena glacialis*) in the form of a skeleton, loaned to the Aquarium by the Marine Environmental Education Trust.

#### 2001

The Sappi Eco-Theatre opens and features a short, yet powerful cinematographic experience entitled *The Web of Life*. We join a young boy on a journey during which he is reminded that human actions can have disastrous consequences for our environment. The presentation ends with the statement, "If one person can make a difference, imagine what 6-billion of us can do - a thought to take home."

On 8 December 2001 the Aquarium opens its second large-scale temporary exhibit, *The Living Dead – Travelled in Time, Locked in Rock*. The exhibit includes "living fossils" such as crocodiles, iguanas and giant deep-water isopods. Many of the animals on display have remained virtually unchanged over millions of years.

The first African penguin (Spheniscus demersus) chick to hatch in the Sappi River Meander is tagged and sent to seabird rehabilitation centre SANCCOB before being released into the wild.

The first fully equipped wet laboratory opens in the Old Mutual Environmental Education Centre. This exciting new facility, complete with aquariums, terrariums, microscopes and other laboratory equipment, provides opportunities for hands-on experiential learning and close inspection of a range of animals and plants.

Eighteen smooth-hound sharks (*Mustelus mustelus*) are born in the *I&J Predator Exhibit* on 17 August 2002.

#### 2003

In partnership with the City of Cape Town, the Aquarium opens the Children's Puppet Theatre on 10 March 2003. This fully automated three-act marionette presentation depicts a young boy, Tshepo, who learns about various water-related dilemmas. Using humour and music, a cast of vibrant, colourful characters conveys important environmental messages to the audience in an unusual and positive manner.



African penguins in the Sappi River Meander exhibit

An African black oystercatcher chick (*Haematopus moquini*) hatches in the *Sappi River Meander*. As far as we know this is the first time this endangered species has bred in captivity.

#### 2004

On 18 March 2004 the Aquarium, in collaboration with AfriOceans Conservation Alliance, releases Maxine, a large (197kg) ragged-tooth shark (*Carcharias taurus*), back into the ocean. Maxine is the iconic ambassador for the Save our Seas Foundation M-Sea (Maxine Science, Education and Awareness) Programme. With assistance from South Africa's leading shark experts, the M-Sea Programme provides a unique opportunity to learn more about the lifestyle of ragged-tooth sharks and to raise public awareness of the plight of sharks worldwide.

President Thabo Mbeki and Zanele Dlamini visit the Aquarium on Christmas Eve.

#### 2005

Baroness Margaret Thatcher and the Prince of Denmark visit the Aquarium in January 2005.

In collaboration with AfriOceans Conservation, the Aquarium releases its second ragged tooth shark, Val, back into the ocean as part of the ongoing Save our Seas Foundation MSea Programme entitled "Rethink the Shark".

Extensive renovations take place to accommodate a larger, more defined tropical gallery to differentiate more clearly the unique features of the Atlantic and Indian Ocean galleries.

The sponsored pensioner programme is launched. To date, the programme has allowed more than 5 000 disadvantaged pensioners to visit the Aquarium for free. The introduction of the Adopt-A-School programme has enabled the corporate sector to assist the Aquarium in bringing in more than 11 000 previously disadvantaged school children to the Aquarium.

On 13 November 2005 the Aquarium celebrates its 10th birthday in style.

#### 2006

July 2006 marks the beginning of five months of major renovations to the east wing of our building, including:

Maxine's first moments back in the ocean. Photograph by Geoff

- Opening of the Shoreline Café, our new restaurant with the first dedicated children's area in the Waterfront, in December 2006 under Aquarium management;
- · Relocation and complete refurbishment of the Aquarium Shop by Tiger's Eye (part of the Tourvest Group);
- Relocation of the Membership Centre adjacent to the new ticket office;
- Several improvements to the Visitor Services desk, ticket office and foyer to improve visitor flow;
- Establishment of an Adventure Booking Centre to take eco-tourism bookings and the establishment of a tuck shop to cater to our take-away market;
- Relocation of the City Sightseeing Bus offloading terminal and establishment of a ticket office directly in front
  of the Two Oceans Aquarium, which has had a significantly positive impact on visitation.

#### 2007

The 65% shareholding in the Aquarium that is held by Transnet Pension Fund is bought by Waterfront Holdings.

The Waterfront is subsequently sold to London and Regional Properties and Dubai World and a smaller BEE

consortium in January 2007.

The Two Oceans Aquarium continues to grow from strength to strength in all its areas of operation and our future is looking very positive indeed. The recent acquisition of the V&A Waterfront by London and Regional Properties and Dubai World will result in a mammoth expansion and upgrading of the Waterfront and, along with this, the Two Oceans Aquarium

We look forward to hosting our international Aquarium colleagues in 2012.

#### Exhibits & research

Situated in Cape Town, at the southern tip of Africa, the Two Oceans Aquarium is ideally positioned to showcase the incredible diversity of marine flora and fauna off the Southern African coast.

#### Our exhibits

The Aquarium presents South Africa's rich ocean and aquatic life in six galleries, which include the *Oceans of Contrast: Indian Ocean Gallery*, the *Oceans of Contrast: Atlantic Ocean Gallery*, the *AfriSam Children's Centre*, the *Sappi River Meander*; the *Kelp Forest Exhibit* and the *I&J Predator Exhibit*.

#### The Indian and Atlantic Ocean galleries – a kaleidoscope of marine life

These galleries introduce our visitors to a kaleidoscope of marine life. It is here that they come face to face with translucent, fragile jellies; alien-like giant spider crabs; the shy octopus, master of camouflage; beautiful, yet venomous devil firefish; and many other colourful and varied life forms. The exhibits in these galleries are perpetually changing and, in 2004 alone, we brought in juvenile ragged-tooth sharks; increased the size of the Knysna seahorse (*Hippocampus capensis*) exhibit; added juvenile yellowtail (*Seriola lalandi*), hatched from eggs collected in the *I&J Predator Exhibit*; and opened *Denizens of the Deep*, which features kingklip, horse fish, jacopevers, deep-water crabs and spiny lobster. We also introduced unique exhibits that include acrylic magnifiers in the design. These displays offer enlarged and sometimes quirky views of the exhibit inhabitants.



Our volunteers at the Touch Pool and Microscope play a vital role in the Diversity Hall, providing visitors with fascinating snippets of ocean information, substantially enhancing the quality of their visit.

#### The AfriSam Children's Centre – a hive of excitement and energy

The *AfriSam Children's Centre* is always buzzing with the excitement and energy of children. Their gleeful laughter filters through other areas of the Aquarium as they are entertained and informed through puppet shows featuring delightful shark, octopus, penguin, eel, turtle and sunfish hand puppets. Children are encouraged to create fishy artworks to take home to their families.

#### The Sappi River Meander – the story of a river

The Sappi River Meander traces the journey of a pristine river from its mouth, back through a freshwater reedbed (complete with a bird-hide), to its origin as a stream high up in the mountains. Over the years this exhibit has matured into one of our most inspiring exhibits and now boasts a 10-year-old milkwood forest; a breeding colony of African penguins (from which we have released 13 juveniles into the wild); rockhopper penguins (Eudyptes chrysocome) and a wide selection of freshwater fishes, both indigenous and alien to our Western Cape rivers. The recent addition of the bird-hide overlooking the wetland offers people a place to sit and relax in this peaceful, riverine environment.

The connection between land and sea was identified as a key component in ocean conservation at the International Aquarium Congress held in Tokyo in 1996. We have responded to this challenge in many areas of our operations, including our interpretative materials. In the bird-hide, we recently introduced an impressive 6m aerial photograph of the local Lourens River as it tumbles through the Hottentots Holland Mountains and meanders through the town of Somerset West on its way to False Bay. Here we emphasise the point that, since all our rivers run to the sea, whatever we do on land affects the sea.

#### The Kelp Forest Exhibit – an enchanted forest

Kelp forests are displayed in only two aquariums in the world – Monterey Bay Aquarium (arguably the best aquarium in the world) and the Two Oceans Aquarium. In our Aquarium, three species of giant kelp provide shelter for an array of local fish, which drift among the kelp fronds. Our visitors are mesmerised by the gentle hypnotic sway of the tall kelp plants and the play of dappled sunlight on silver fishes. Central to the "two oceans" theme, this enchanting forest remains one of our biggest draw cards, and many visitors return time and again to its beauty and tranquillity.

#### *I&J Predator Exhibit* – a feast of ocean predators

Without a doubt, the most popular animals in the Two Oceans Aquarium are our

large ragged-tooth sharks, housed in the *I&J Predator Exhibit*. This 2-million-litre exhibit also showcases an impressive collection of predatory fish from the South African coast. Many of these animals have been with us since we opened and have grown considerably. The sharks, which weighed approximately 90kg when they arrived 10 years ago, now weigh more than 200kg, and yellowtail and kob (*Argyrosomus japonicus*) in this display have grown to sizes rarely seen in today's catches! The sight of a 180kg stingray swimming up the main window while being hand-fed by a scuba diver is a breathtaking sight that leaves a lasting impression on our visitors.

#### Conservation & research

In addition to our many inspiring exhibits, we are involved in a number of conservation and research programmes.

Photograph by Karin Schwerm

#### Sunfish

In the early years of the Aquarium we displayed several ocean sunfish (*Mola mola*) in the *I&J Predator Exhibit*, but always with limited long-term success. These gentle, open-ocean giants feed almost exclusively on jellyfish and can attain over 3m in length and weigh over 2,000kg. Although we have no sunfish on display, we remain committed to assisting injured or stranded fish and to contributing to research on these enigmatic animals.

We currently support Dr Tierney Thys from Monterey Bay, California, who is conducting research on



Photo courtesy Cape Argus

sunfish on a global scale. We have supplied her with tissue samples for DNA analysis, helped her to tag sunfishes in our waters with satellite tags and collected observer data from fishing boats. In the future, we plan to increase our involvement in her research on this fascinating, but little-known giant.

#### Finfish aquaculture

Several species of fish displayed in the *I&J Predator Exhibit*, including kob, yellowtail, geelbek (*Atractoscion aequidens*) and leervis (*Lichia amia*), have spawned naturally in the exhibit since the Aquarium opened. This successful breeding behaviour attracted the interest of scientists researching the culture of these highly-prized fishes and we gladly supplied eggs for their pilot studies. The decline of local finfish stocks in recent years is of great concern to us at the Two Oceans Aquarium and we feel that, in the interests of our fishing communities and wild fish stocks, more emphasis should be placed on fish farming rather than fishing. To this end we have established our own culture laboratory and continue to assist organisations such as I&J, Espadon Marine Hatcheries, Global Ocean and Marine and Coastal Management's research aquarium in Sea Point with the supply of fertilised eggs for initial growth trials, and the capture and transport of large fish for brood stock.

#### Shark conservation and awareness

In 2003 we joined forces with AfriOceans Conservation Alliance (AOCA) and the Save our Seas Foundation to raise awareness of the plight of sharks worldwide and the desperate need for their conservation. The Save Our Seas Foundation M-Sea (Maxine Science, Education and Awareness) Programme consists of three components:

- 1. Science tagging of Aquarium and wild ragged-tooth sharks with satellite and ultrasonic tags;
- 2. Education and awareness including teacher workshops, children's activity books and information boards placed at strategic points along the South African coast; and
- 3. Documentary films including a one-hour documentary on South Africa's ragged-tooth sharks.

Central to the launch of this high-profile public awareness programme is Maxine, a large female ragged-tooth shark, which was released from the Aquarium on 18 March 2004. The exposure generated by this exercise has been substantial and far-reaching and, with the release of our other ragged-tooth sharks at intervals in the future (our second ragged-tooth shark, Val, was released on 4 April 2005), we hope to contribute significantly to our knowledge of ragged-tooth sharks in the wild and change perceptions of sharks in general. The beauty of this programme is that it allows us to extend our conservation reach far beyond the Two Oceans Aquarium, and this is imperative if we are to contribute effectively to the wellbeing of all sharks in the oceans

### International collaboration

There has always been good collaboration between aquariums globally. From the day the foundations of the Two Oceans Aquarium were laid to the present, we have received tremendous support from international aquariums. We, in turn, have assisted many aquariums around the world with the exchange of ideas and/or the supply of animals. We have established close associations with Tokyo Sealife Park, Japan; Underwater World, Singapore; Ocean Park, Hong Kong; The Scientific Centre, Kuwait; Valencia Aquarium, Spain; Lisbon Aquarium, Portugal; Zoo-Aquarium Berlin, Germany; Pittsburg Zoo and Aquarium, USA; Newport Aquarium, USA and Monterey Bay Aquarium, USA.

#### **Education initiatives**

The southern tip of the African continent is the meeting place of the two bountiful oceans, the Indian and the Atlantic. These waters, together with over 3,000km of magnificent coastline, are an invaluable economic resource, providing employment for thousands of South Africans in the fishing and tourism industries.

#### Environmental education at the Two Oceans Aquarium

The Two Oceans Aquarium has established itself as a key player in raising environmental awareness through its high quality exhibits, conservation and education programmes.

In recent years we have rapidly gained recognition as a leading environmental education centre in South Africa. The degree to which we are recognised within the environmental education community was highlighted recently when Phillip Ivy, the Environmental Education Advisor to the previous Minister of Education, was willing to join our education team for a short period. Mr Ivy continues to contribute to our programmes on an ad hoc basis.



A further acknowledgement of our capabilities and resources is our selection as the Western Cape's teaching centre for the World Wildlife Fund's national Sustainable Seafood Initiative. This programme is in response to dwindling marine resources and we eagerly await its development and launch.

## Our environmental education programmes Discovery Centre programmes

At present, no other environmental education centre in the country can match our facilities. Our two discovery centres were designed by our staff specifically to enable stimulating and relevant hands-on experiences. Laboratory benches fitted with aquariums allow learners to closely observe, touch and hold the animals or plants. We also have an excellent array of AV equipment, including microscopes linked to video monitors, which are used to describe the lives and functions of many microscopic animals not normally seen with the naked eye. Our teaching staff have developed more than 30 topics for hands-on experiences in the discovery centres, covering a broad selection of ecosystems, from catchment areas to the oceans. The topics for the natural sciences include invertebrates; reptiles; amphibians; coastal birds; marine food chains; kelp forest ecology; river ecology; wetlands; water conservation and fynbos. We also offer courses which go beyond the natural sciences and into the fields of maths, physics, languages and art.

#### Other education initiatives

In addition to our discovery centre-based programmes we also offer the following:

- In the *AfriSam Children's Centre* we cater mainly for preschool children, concentrating on activities such as interactive puppet shows and arts and crafts. Our puppet shows are written and produced by two of South Africa's top puppeteers, Cheryl Abromowitz and Janni Donald, both of whom trained our staff in puppeteering skills. The Centre is recognised for the fact that children are involved in healthy pursuits which encourage innovation and a sense of achievement and pride a rarity in an age where electronic entertainment is increasingly pervasive.
- Our Oceans in Motion outreach programme aims to reach people from communities who cannot visit the Aquarium. By visiting schools in these communities with our fully equipped mobile aquarium trailer, we offer children an unforgettable experience with live marine animals. In particular, we focus our programmes on those children who are likely to depend on the sea for their livelihoods in the future. Coastal towns such as Saldanha on the west coast and Hawston and Gansbaai on the south coast are a high priority, as are traditionally disadvantaged areas such as Langa, Gugulethu and Khayelitsha.
- Our Matric Biology Winter Revision Programme focuses on assisting historically disadvantaged students with potential. Last year's revision course, which involved 60 matric pupils, resulted in an average increase of 12% among students who had all failed their Biology exam in June. One student achieved a distinction at the end of the year.
- Our Young Biologist Programme is offered to a selection of students who show leadership potential and an interest in marine life. These students are introduced to a range of freshwater and marine animals as

- they explore the exhibits in the Aquarium, investigate these animals in our classrooms and discover the ocean and its inhabitants while snorkelling on a weekend field trip.
- We offer matric teachers the opportunity to use our equipment, facilities and expertise to cover practical sections of the syllabus.
- Our Teacher Enrichment Workshops focus on teaching school teachers how to incorporate marine life and environmental conservation themes into their lessons at school.
- The facilities in our discovery centres allow us to invite tertiary lecturers to use our facilities to expose their students to living marine animals. For some zoology students this has been their first opportunity to observe living marine animals.
- We are confident that, in future, we will cast our net even wider and empower our children to become the future guardians of South Africa's ocean legacy.

© 2012 IAC. Web development by Flow Communications