

Looking after the foundation of life

WITH three-quarters of its surface covered by water this is undoubtedly a blue planet – so much so that acclaimed science fiction writer Sir Arthur C Clarke stated: "How inappropriate to call this planet Earth, when it is quite clearly Ocean." This viewpoint puts into perspective the immense scale of the global ocean which, for more than four billion years, has controlled the destiny of life on the planet.

It is the very foundation of Earth's life support system, not only powering the climate and weather patterns of the continents, but supplying up to 80% of the planet's oxygen and storing and cycling some 93% of its carbon dioxide. The ocean is also a gigantic heat sink and reservoir of biodiversity, holding much of the planet's biomass.

Life on land is dependent on life in the ocean, yet only in our time have we begun to understand its importance or to extrapolate that what happens in the ocean directly affects us on land. This awareness, however, has done little to prevent "sea blindness", which has meant that submerged out of sight marine habitats have largely been out of the public's mind. A "charisma gap" has also meant that many marine creatures, lacking the appeal of their terrestrial counterparts, have been overexploited to the point of extinction – extinction having reached an unprecedented rate with barely a whisper of public outrage.

Race to the bottom

All over the world pressure on the marine environment is increasing enormously. Sixty percent of the global population is settled in the coastal zone, with urbanisation causing the rate of loss of vegetated coastal habitats such as mangrove forests, salt-marshes and seagrass meadows, which are ranked among the most productive habitats in the world, to be four times that of rainforests, making them among the most threatened habitats in the biosphere.

Phosphate mining, oil and gas exploration, and bulk seabed extraction are negatively impacting on critical marine ecosystems. Globalised markets, a growing human population and changed consumption patterns have led to increased trade in fish and fish products, which, combined with declining fish stocks on a worldwide basis, has led to a discernible "race to the bottom".

Advances over past decades in fish-finding technologies such GPS positioning and sonar



Because marine ecosystems and food webs are interconnected and extremely complex, the loss of sharks as apex predators may cause dramatic shifts in the ecology of marine ecosystems with unexpected results and far-reaching implications. Overexploitation of the world's marine environment is putting fisheries at risk of collapse, which could mean that hundreds of millions of people could be faced with food shortages and food insecurity. The negative effects of overfishing would also adversely affect the approximately 200 million people employed in the global fishing industry.

most of the species. From 150 000 pairs in the 1950s, African penguins are down to 20 000 pairs.

Positive sustainability initiatives

More than half of the global ocean lies beyond national jurisdiction – 64% to be exact. Through international organisations such as the Regional Fisheries Management Organisation (RFMO) which manage fish stocks on the high seas, attempts are being made to sustainably manage fishery resources through international agreements. The Indian Ocean Tuna Commission (IOTC), which manages tuna and tuna-like species in the Indian Ocean and adjacent seas, also plays an important role, as do conservation organisations such as BirdLife South Africa (BLSA). independent task force of international political figures and leaders from business, economics, development and law formed the Global Ocean Commission in February this year, with the Commission's inaugural meeting having taken place in Cape Town in March.

The objective of the Commission is to analyse threats, challenges and opportunities concerning the high seas in order to develop pragmatic, cost-effective recommendations, which, if adopted, will reverse degradation of the global ocean and restore it to full health and productivity.

Trevor Manuel, co-chair of the Global Ocean Commission, and minister in the South African presidency responsible for planning, says: "If society is to develop sustainably it's vital that we manage the ocean wisely, on two different timescales. In the short term, we need put the extractive industries using the ocean on a sustainable footing, whether that's mining, fishing or anything else. If we get that right, we'll feed and resource people better and help societies develop sustainably. In the longer term, the ocean is an integral part of the biosphere, which is our life support system. You can't risk that. So what we're doing in the Global Ocean Commission is to look at these issues, talk to experts and practitioners in all the relevant fields, and then distil their expertise into a number of key reforms that we have to implement as a global society of seven billion people if we are to continue benefiting from everything the ocean provides". Recognising the increasing influence that informed consumers are having on market trends and building on the success of the WWF-SASSI (Southern African Sustainable Seafood Initiative) consumer awareness programme, the WWF-SASSI Seafood Circle, which is sponsored by Pick n Pay, was launched in February this year. The purpose of the WWF-SASSI Seafood Circle is to acknowledge committed restaurants and chefs who are going the extra mile in terms of seafood sustainability by actively championing sustainable seafood practices in their restaurants. At the launch function in Cape Town, 12 restaurants were recognised out of a field of 45 shortlisted candidates. In April this year the SAMSA Sea Pledge Sustainable Seas Trust Saldanha to Sodwana Tour, with internationally-acclaimed ocean scientist Dr Sylvia A Earle as Patron was launched in Cape Town to promote coastal conservation, education and empowerment for the many South Africans who rely on coastal areas and the ocean for their livelihood. In some notable cases, the corporate

sector is also doing its bit by initiating sustainability programmes that are set to make a difference to what is happening out at sea.

Seafood retail improvement plan

Pick n Pay acknowledges that there is global concern over the exploitation of seafood resources and the environmental impact of fishery and aquaculture activities on marine and aquatic ecosystems. As a retailer and a significant role player in the seafood industry, it is committed to helping drive positive change in fisheries by supporting and promoting sustainable seafood choices from legal and responsibly managed sources. availability of sustainable seafood and to promote responsible fishing practices and it recognises that a significant proportion of the world's fisheries/aquaculture facilities do not currently meet internationally accepted standards of sustainability. Rather than simply discontinue sourcing, the company would rather use its buying power to provide both an incentive and a path to become sustainable for these operations. Thus, by the end of 2015, in order to continue supplying Pick n Pay, any fisheries/aquaculture facilities whose seafood products do not meet Pick n Pay's sustainability requirements must be engaged in a credible, time-bound improvement project. It will cease procuring all seafood products not meeting these criteria by the end of 2015.

Pick n Pay believes that its consumers have the right to sufficient and accurate information about any seafood product on sale, in order to make environmentally responsible choices. In this regard it has committed to providing its consumers with information on the common and scientific name, as well as the country of origin of all of its seafood products. Pick n Pay has also committed to training its staff so as to help consumers to make more environmentally-aware seafood choices.

According to Dr Sylvia Earle we are seeing "geological change taking place before our eyes". At this moment in history our conservation measures could have a "magnified impact". This necessitates that we must urgently choose, "while we still have time, to protect what still works", "shifting gears" in the interests of future generations. It is up to each of us and the time is now.

What you can do

If you are unsure that the fish you are wanting to buy either from a retailer or restaurant is caught in a way that is environmentally friendly, you can text SASSI on 079 499 8795 with the fish species and you will receive an SMS back as to whether it's in the red, orange or green category;

See the WWF-SASSI website at www.wwf.org.za/sassi for seafood species categorisation or see www.dining-out.co.za for a list of WWF-SASSI participating restaurants and retailers:

Only buy fish with the MSC eco-label; Join conservation organisations such as BirdLife South Africa (BLSA) – **www.bird**

which can find fish in 1 000m of water, an increase in the size and sophistication of fishing vessels and coordinated air-sea fishing efforts have increased relative effort exponentially.

This has meant that with a global fishing fleet of approximately 4.3 million vessels targeting a wide diversity of marine species, the proportion of overexploited, depleted or recovering fish stocks increased from 10% in 1974 to 32% in 2008, with 63% of assessed fish stocks currently requiring rebuilding.

The problem with bycatch

Incidental capture of unwanted species not targeted by fishing vessels, which is termed bycatch or trashfish, is considered one of the greatest threats to the health of the marine environment.

An estimated seven million tonnes of bycatch is being caught and discarded each year. This is not only a shocking waste of a valuable resource; it is causing dramatic declines in many marine species. And as many bycatch species are top marine predators such as sharks, anthropogenic changes to marine ecosystems through overfishing and destructive fishing practices could have severe knock-on effects.

For 400 million years sharks have remained largely unchanged. They have survived five mass extinctions, however as between 73 and 100 million sharks are killed each year for the growing shark fin trade, sharks now represent the greatest percentage of threatened marine species on the International Union for Conservation of Nature's (IUCN's) Red List of Threatened Species.

Habitat modification through climate change is also affecting species such as the Zambezi shark, a partially estuarine-dependent species which moves into estuaries to give birth to pups.

Pertinent South African statistics

Of South Africa's 3 000km long coastline 20% consists of Marine Protected Areas (MPAs); 11% is protected by no-take MPAs and 0.4% of the South African Exclusive Economic Zone (EEZ) is covered by MPAs.

The City of Cape Town administers a 300km stretch of coastline, 60km of which is in the Table Mountain National Park, which is the longest coastline of any municipality in the country. It is also Cape Town's single greatest economic and social asset.

0.5% of South Africa's GDP comes from commercial fisheries. Of our commercially important marine species 48.1% are optimally exploited; 29.6% are status uncertain; 14.8% are overexploited and 7.4% are underexploited. Approximately 25% of our commercially important species are reef-associated, making them directly linked to food security and job opportunities.

Long-term rights have been issued in 22 fishing sectors with more than 2 900 rights holders and 1 788 vessels.

The only fisheries in South Africa to be certified by the Marine Stewardship Council (MSC) are the trawled deep- and shallow-water hake fisheries.

It is estimated that the illegal catch of abalone exceeds the legal commercial catch by more than 10 times.

Approximately 500 000 people participate in South Africa's shore-based recreational fishery with the estimated value of the fishery in 2011 being R3 billion.

Of 550 species globally, South Africa has the second highest level of shark diversity in the world, however, we know almost nothing about



With around 300 000 seabirds being caught each year as bycatch, global tuna longline fleets and the trawl fishery have been responsible for massive seabird population declines. As a result, 27% of seabird species, including 17 albatross species, have become threatened with extinction.

In 2006, South Africa became the first country to establish an Albatross Task Force (ATF) team with Argentina, Brazil, Chile, Ecuador, Namibia and Uruguay following suit. Through promoting various bycatch mitigation measures that include setting lines at night so that the seabirds can't see the baited hooks, and weighting lines so that they sink, as well as constructive engagement with the longlining and trawl fisheries, the hooking of albatross has reduced from around 12 000 to 16 000 birds a year to "low hundreds". There has also been a more than 80% reduction in the catching of seabirds from trawl fleets in South African waters.

In a bid to chart a course towards a sustainably productive ocean, and to do it quickly, an Pick n Pay was a founding partner of the WWF-SASSI Scheme and, in 2010, it announced that it had signed a partnership agreement with the WWF Sustainable Fisheries Programme in a bid to support the programme.

The three-year partnership in which Pick n Pay is investing more than R6 million supports the WWF's drive to promote an ecosystem approach to fisheries (EAF), recognising the critical role that marine ecosystems play in maintaining resilient socio-cultural systems in the face of growing threats of climate change and food security.

Pick n Pay defines sustainable seafood as seafood which originates from a fishery or farm which could continue to operate indefinitely without reducing the target species, or any other species in the marine ecosystem's ability to maintain a viable population. A sustainable species should:

Not be a species that is regarded as endangered or threatened;

Be caught in a well-managed fishery by registered commercial fishers;

Be caught/farmed using responsible fishing/farming methods; and Be traceable from "boat/farm to plate".

As such Pick n Pay commits to transforming its fresh, frozen and canned seafood operations to ensure that by the end of 2015 it will only sell seafood products which are certified as sustainable by the Marine Stewardship Council (MSC) for wild-caught products or the Aquaculture Stewardship Council (ASC) for farmed products, or equivalent standards, or which are categorised as Green by WWF-SASSI.

The company's overall goal is to increase the

life.org.za to add your voice to conservation efforts and/or volunteer for rehabilitation organisations such as Sanccob (Southern African Foundation for the Conservation of Coastal Birds) – www.sanccob.co.za;

Celebrate World Oceans Day on June 8 by attending the 40Fathoms Film Festival on June 8 to 9 at The Whale House Museum, Hermanus – for more information, email Meaghen at **meag@sharkconservancy.** org or call 028 312 3029;

Become involved in initiatives such as the SOS (Save Our Seabirds) Festival which is being held from October 7 to 12, centered around the Iziko SA Museum – call Christina Moseley at BLSA on 021 419 7347 or email christina.moseley@birdlife.org.za;

Write letters to the Minister of the Department of Agriculture, Forestry and Fisheries (DAFF) about your concerns – www.daff.gov.za, or call 012 319 6000; and Become a member of organisations

such as the IOTC – www.iotc.org.

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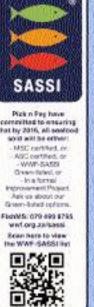
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Pick is Pay has committed to stocking only sustainably sourced seafood by 2016. That means we will only offer our customers seafood that is either Marine Stewardship Council (MSE) certified. Aquaculture Stewardship Council (ASE) certified. WWF-SASSI green listed or sourced from fisheries/farms which are engaged in credible, time-bound improvement projects.

Just one of the many ways we can all act today to change tomorrow.

