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Welfare No: W/0 30/94 www.matobo.org

NEWSLETTER 95 / JANUARY 2016

1 - OBITUARY – ROY STEPHENS

12 April 1935 – 27 November 2015

Former Chairman and a founder member, Roy was always a proud supporter of the Matobo Conservation Society.

He passed away unexpectedly on 27th November, 2015, at his home in Bulawayo.

Roy was born in Bulawayo in 1935 and lived his entire life in the city, contributing to the sporting, cultural and business community of the city.

He attended Milton Junior School, and then went on to Milton Senior where he was head-boy in 1952. He joined the Bulawayo Board of Executors and Trust Company in 1958. He retired after 42 years' service in 2000 as both Chairman, a position he had held for many years, and as Managing Director. He was elected President of the Chamber of Mines, having served for many years on the Executive and as Vice-President. He was also Chairman of the Mining Industry Pension Fund. He was instrumental in the establishment of the Zimbabwe School of Mines in Bulawayo. Following his retirement in 2000 he was elected as a Life Member of the Chamber of Mines.

For many years he served as Chairman of CABS. After his retirement he served as CEO of ABUZ, and was also Chairman of the Bulawayo Publicity Association, on which Executive he served for ten years. On the sporting arena, Roy captained Matabeleland Hockey, and went on to play for his Country. He was a member of the first National Hockey Team to travel abroad. He also represented his country in basketball, whilst his rugby career came to an early end with a broken knee at school! He was also an avid tennis player.

As a boy he grew up very involved with Boy Scouts, with his crew winning the annual Assegai Competition, and earning his troops first Kings Scout Award. He went on to become a member of the Raylton Rover Crew, and was one of the last surviving members. Roy's father, Gerald, also a keen Scout, helped establish Gordon Park in the Matopos, in 1936. Roy was a year old at this time, but it meant that he would effectively grow up in the Park. Under the guidance of Skipper Knapman, a lifelong family friend and first Ranger at Gordon Park, Roy learnt his trees of the Matopos, and from this a lifetime hobby in botany that was immensely rewarding and resulted in some significant work done in the Matobo Hills. Roy drafted the first tree check list for the Matobo Conservation Society, contributed to the World Heritage submission and was always willing to share his knowledge.

Roy's great passion was the Matobo Hills. Apart from his depth of knowledge and love of all that the hills have to offer, he was a member of the Rhodes Estate Matobo Committee, and served as Chairman of the Matobo Conservation Society, Matabeleland Tree Society and the Bulawayo Aloe and Cactus Society.

Roy is survived by Joan, his children Sally, Gavin and Desmond, and four grandchildren – all who have grown up to share his "Matopos Passion". He will be sadly missed by all who knew him.

2 – ANNUAL GENERAL MEETING; NEW COMMITTEE

Our AGM was held successfully on 29th November, 2015. Your Committee was returned en-bloc, and there have been no changes in the office bearers, namely:

Chairman Gavin Stephens
Vice-Chairman Jean Whiley
Secretary Gaynor Lightfoot
Treasurer Darryl Friend

Members Adele Edwards, Rob Burrett, Paul Hubbard and Cindy Sellick

3 – MATOBO PARK NEWS

Sadly, despite the best efforts of the Park Authorities, widespread veld fires burned in much of the Park. The Park was not able to restock with the 150 wildebeest that were referred to in the last newsletter, but we understand that 50 zebra were introduced.

Rain is desperately needed, both to bring fresh foliage to those areas burnt, but also to bring the rivers back to life. Maleme Dam is almost dry!

4 - WORLD HERITAGE MANAGEMENT COMMITTEE

The Management Committee, under the chairmanship of the MCS, held a fruitful meeting in November. There has been ongoing discussion since the last meeting.

5 - NEXT EVENT

Date 28th February 2016

Venue Kelembeghwe cave, Ntolowose Hill and the Nendeleki stream

Meet 8:15am to leave by 8:30am, Churchill Arms Car Park

Travel All vehicles

Details Provide own chairs, tables, meals and drinks. Don't forget your hat!

We endeavour to hold an outing in the middle of summer where we can enjoy the mountain streams and beauty of a "wet" Matopos. This is going to prove impossible in 2016 – unless there is a real change in fortune between the posting of this newsletter and our outing! However, we will visit a fairly large cave on Ntolowose Hill, and then continue to the Nendeleki stream in the hope that there is water. This requires travel down the Old Gwanda Road, and the Sotcha Loop.

6 - REPORT BACK

Our AGM got underway in a sombre mood following the announcement of the passing of our Member and former Chairman, Roy Stephens. The business opened with a moment's silence, and then proceeded briskly with the Chairman delivering his report.

Following the meeting, Dr Kyle Good kindly spoke to the members; firstly about the setup and facilities at The Farmhouse; and then about the planned programme to use tracking dogs for anti-poaching work. Recently The Farmhouse has partnered with Canine SOUL (Safeguarding our Legacy), a trust that has started the programme. The dogs and handlers will be based at The Farmhouse but will be available for work country wide, particularly in areas of high concentration of rhinos such as Matopos National Park and Bubi Valley Conservancy. This location will enable quick response times. Initially they will be using imported Malinois (Belgian Shepherd dogs) which are already trained and have a proven record as tracking dogs. In the long term it is intended to train local dogs and also to have dogs trained for both tracking and detection. The topic generated a lot of interest and many questions were asked. It is fascinating that dogs can be trained to detect scents as different as drugs and fruit, explosives and rhino horn. This ability is being put to use in more and more varied ways to assist conservation efforts around the world.

Initially the day was cool and damp and the meeting was held in a thatched, open sided building. By the time the talking was over the weather had cleared and everyone moved outside to enjoy a picnic lunch while admiring the spectacular view. The back camp is situated near the site of an old village and we were able to see some grain bins and grub around to discover bits of pottery and beads.

We thank The Farmhouse for hosting the AGM and giving us access to their estate.

7 – ILLEGAL SABLE EXPORT

3 SA nationals fined for illegal sables exports: 3 South Africans facing charges of illegally exporting sables to their country using an undesignated route were yesterday fined \$2 600 each after they were convicted of various charges. The 3, Edwin Hewitt, Blignaut Hendrick Johannes and Pretorius Herbert John, were convicted on their own plea of guilty when they appeared before Beitbridge magistrate Willard Mafios Moyo – NewsDay, Friday November 6, 2015.

8 – CALENDAR 2016

Herewith the proposed dates for the 2016 field trips – make a note in your diary! 28^{th} February – Ntolowose Hill and Nedeleki stream May- TBA

5th June – World Environment Day - Clean Up July - TBA 4th September - Brachystegia Outing November - AGM

Other dates

9th – 13th March 2016 Matopos Heritage Challenge 3rd April 2016 Matopos 33 Miler Ultra-Marathon

9 – www.matobo.org

The web-site for the Society has been updated, so make some time to visit the site. Contributions are welcome. We are also in the process of revamping our Facebook page.

10- MATOPOS HERITAGE CHALLENGE

Entries for the Matopos Heritage MTB Challenge opened in the second week of January, and were fully subscribed within hours. Despite the dry conditions, we hope for another successful event, with preparations well underway.

In advance of the event, and in conjunction with National Museums, the MCS will be refurbishing the Nsvatuke Site Museum (a check point on the ride) and National Parks is endeavouring to repair the road to the site.

11 - MATOPO SAILING CLUB UNDERGOES MAJOR FACELIFT

(Sunday News Online Dec 20, 2015)

One of the country's oldest leisure centres, Matopo Sailing Club is undergoing major infrastructural upgrading and has set sights on improving its recreational activities as it bids to enhance its status as one of the best hospitality resort areas on the outskirts of the City of Bulawayo.

Matopo Sailing Club managing director Mr Rodgers Hove said renovations of chalets and ablution facilities for use by campers was at an advanced stage.

"We are in the process of face-lifting virtually all our infrastructure to ensure that it remains attractive, hospitable and user friendly to our visitors. Most of the infrastructure here was built in the early 1920s and needs to be constantly kept intact though of course we won't tamper with its ancient-like features, as some of the guests enjoy viewing the antique architecture," Mr Hove said.

Refurbishment of two of the four chalets has been completed with the other two including both the male and female campers' ablution facilities set to be completed this week.

"We are refurbishing our chalets because we realised that some of our guests would need to sleep after having consumed excessively rather than for them to drive back home while some will enjoy an all-day outing in this serene environment. There is no doubt that the sailing club offers a tranquil environment away from the hassle and bustle of town life.

"We are also refurbishing both male and female ablution facilities after some tourists from South Africa requested us to do so as they are seeking to come back before the end of the year or early next year with a bigger entourage for camping and thereafter we anticipate hosting more tourists as they network with others," Mr Hove said.

He said tourist's en-route to Matopo National Park could also make a stopover at the sailing club for refreshments before embarking on their expedition. Matopo Sailing Club boasts of a number of recreational activities such as braai, nature walking, fishing and canoeing. "We intend to increase our leisure activities and already we are looking at bringing two boats to enable those that are fond of such activities to enjoy themselves while also fishing if they so wish to. Currently we have only two canoes. "Of course our dam's capacity has over the years been affected by siltation but it's still big enough for people to enjoy various water activities. However, we have engaged the National Parks and Wildlife Management Authority to remove algae and some aquatic plant that continues to cover the dam," Mr Hove said.

He said there are also plans to increase recreational activities for children to enable the club to accommodate families. "We are also looking forward to improving children's playing activities by adding a jumping castle and introducing horse rides as we want this place to be accommodative to families as well," Mr Hove said.

He said apart from hosting weddings and parties, plans are underway to invite high profile musicians to come and perform at the venue.

12 - RHINO NEWS

CIO agent up for rhino poaching: A Central Intelligence Organisation operative based in Masvingo has been dragged to court on four counts of killing rhinos valued at \$480 000 and selling the horns to private buyers in Zambia. Mudenge Munashe Mugwira is among the five-member syndicate arrested alongside Tavengwa Machona and Jason Chisango, who are being separately tried on the same charge. They are facing a charge of contravening Section 45 (1) (a) of the Parks and Wildlife Act. The other two, Chris Kombayi and Dumisani Moyo, have evaded arrest and are on the run. Machona was last Friday slapped with a 35-year jail term by Masvingo magistrate, Langton Ndokera. Mugwira and Chisango are awaiting trial – *NewsDay*.

35 years in jail for Zim rhino poacher, News24, January 1, 2016

Zimbabwe - Conservationists in Zimbabwe on Friday welcomed reports that a poacher who was part of a gang that killed two rhinos in the south of the country has been sentenced to 35 years in jail. The state-controlled Chronicle newspaper reports that the unusually heavy sentence was handed down to Tawengwa Machona on New Year's Eve by a magistrate in the city of Masvingo. Zimbabwe is battling to save its few hundred remaining black and white rhino amid an upsurge in poaching in 2015. Convicted poachers don't often get sentences of more than nine years in Zimbabwe. Machona's sentence will only be reduced if he manages to pay back 480 000 US dollars - the estimated value of the rhinos - within the next five years, the newspaper says. If he does, he will serve 20 years in jail. The Tikki Hywood Trust, which is well-known for its work rehabilitating endangered pangolins, described the sentence as "a great victory for Zimbabwe". "Congratulations to all departments involved from the ZRP (Zimbabwe Republic Police), to Parks, the magistrates together with the public prosecutors who were involved in ensuring that justice was served," the trust said in a post to Facebook. The two rhinos were killed in 2014 and 2015 in the Save Valley Conservancy near the southern sugar cane-growing town of Chiredzi. Two of Machona's accomplices are being charged separately. The alleged ringleader is an assistant officer in Zimbabwe's secret service. Two more members of the gang are reportedly on the run. "You deserve a deterrent sentence so that you can be a reformed person when you come out of prison," Magistrate Langton Ndokera was quoted as saying. Four rhinos were poached in Zimbabwe's Lowveld region during a three-week period towards the end of the year.

Rhinos are killed for their horns, which are used in traditional medicine, mainly in Asia. They're so valuable that even rhino calves are targeted.

Quartet caught trekking rhino in Matobo MP, Cllr nabbed over poaching: 4 people have been arrested in connection with suspected rhino poaching in Matobo National Park while an MDC-T legislator for Tsholotsho (Proportional Representation), Lwazi Sibanda, has been questioned, police confirmed yesterday. Matobo National Park is located in Matabeleland South. The 4 suspects include Munyaradzi Mwonzora, young brother to the MDC-T secretary-general Douglas Mwonzora. Others are Clement Mazhandu, Shadreck Kuvarega, and Brighton Nkosilathi Nyathi. They were arrested by Zimbabwe National Parks and Wildlife Management Authority rangers on Tuesday afternoon who then handed them over to Matobo police. Mwonzora is also an MDC-T councillor in Nyanga. The quartet was arrested after they were suspected of tracking a rhinoceros spoor in the park. It is also alleged that Sibanda was earlier on spotted in the same park conducting surveillance prior to the arrival of Mwonzora and his accomplices. National police spokesperson Chief Superintendent Paul Nyathi yesterday said further investigations into the matter were underway. The four are expected to appear in court in Kezi on Wednesday next week. The suspects' lawyer, Kholwani Ngwenya, said yesterday that his clients had been charged with criminal trespass and that they would appear in court on Wednesday next week. He said the four were released on summons and that the MP's vehicle was also searched as the police suspected that it was carrying a gun, which they intended to use for poaching. Herald, January 8, 2016. It is understood that the rhino were being followed OUTSIDE of the park.

13 – RAINFALL

Like the remainder of the country, the Matopos had endured unrelenting heats for week on end. What little rain had fallen was simply sucked out of the earth, leaving a very hot and dry landscape. Surprisingly the hills still looked fresh due to the foliage of the trees and bushed, but at ground level, the grass was dry and brittle.

As at 31 December, the western Matopos had recorded 84mm. In the eastern Matopos the following comparison will be of interest:

2015	Eastern Matopos	166mm
2014	Eastern Matopos	310mm
2002	"	099mm
2000	"	100mm
1997		151mm
1991	"	110mm
1990	"	147mm

Worst drought looms: The current drought that has hit the country has had a devastating effect, amid revelations that in some areas, crops are a total write-off, according to farmer organisations. The prolonged dry spell threatens to bring about the worst drought the country has ever experienced. So dire is the situation that government is importing 700 000 tonnes of maize to mitigate the effects of the looming food shortage. Zimbabwe has an estimated annual grain requirement of 1.7 mln tonnes. Zimbabwe Commercial Farmers Union president Wonder Chabikwa said on Wednesday the situation countrywide is bleak – *Independent, Jan* 8

Drought: Chief Masuku of Matobo says in the Chronicle today that "literally everyone is starving" in his area -and he is telling the truth! On recent forays around the Hills there is barely a crop in the ground. In the Communal Areas there is precious little grass available for grazing, Drought relief is woefully inadequate, and so the people of the hills will be in for a very tough time in the year ahead.

Rural communities are now being forced to rush burials of their loved ones owing to prevailing high temperatures that have seen bodies decomposing faster. Chief Masuku from Matobo District on Friday said bodies that are not taken to mortuaries were easily decomposing, forcing villagers to fast-track burials. He said most bereaved families were forced to do everything in a rush and were not waiting for relatives in distant places. He said rising temperatures had also forced people to forego cultural practices by not observing certain times that are deemed inappropriate to bury people. Chief Nyangazonke of Kezi said extremely high temperatures were also forcing villagers to bury bodies during odd hours. He said in his area, it was unheard of to bury an elderly person before midday— *Herald*, January 9, 2016.

Sick of El Niño? You Ain't Seen Nothing Yet, Warns NASA (By Elizabeth Chuck)

The El Niño currently wreaking havoc around the world is forecast to only worsen in 2016 — and NASA expert's fear it could get as bad as the most destructive El Niño ever. A new satellite image of the weather system "bears a striking resemblance to one from December 1997" — the worst El Niño on record — which was blamed for extreme, including record rainfall in California and Peru, heat waves across Australia, and fires in Indonesia. The severe conditions resulted in an estimated 23,000 deaths in 1997 and 1998.

This year's El Niño has already caused wild conditions for much of the United States.: It contributed to the reasons why many Americans experienced a balmy Christmas Eve, with temperature peaking in the 70s in places along the East Coast, and is responsible for deadly storms and near-record flooding in the South and Midwest. It also has been tied to the worst floods in five decades in South America.

But a Dec. 27 satellite image from NASA's Jet Propulsion Laboratory, which measures sea surface heights, implies the worst of the droughts and flooding are still to come — a forecast that is troubling to humanitarian relief agencies. "The El Niño weather system could leave tens of millions of people facing hunger, water shortages and disease next year if early action isn't taken to prepare vulnerable people from its effects," aid agency Oxfam International warned in a press release.

In Ethiopia, for example, the government estimates 10.2 million people will need humanitarian assistance next year due to a drought exacerbated by El Niño, Oxfam said. In Malawi, 2.8 million people are estimated to experience food shortages before March.

El Niños are triggered when winds in the Pacific weaken or reverse direction, resulting in a warming of the ocean in the central and eastern Pacific, mainly along the Equator. Clouds and storms follow the warm water, altering jet stream paths and storm paths around the world. They typically peak late in the year: The name "El Niño" was coined by Peruvian sailors, who were first to notice unseasonably warm

water around Christmas time (El Niño is Spanish for "the boy," or "Christ child"). They occur naturally every two to seven years

14 – SNAKE BITE – WHAT TO KNOW IN THIS DRY SUMMER

(with acknowledgement to Sam Smith)

In recent years, snakes have become more and more endangered, mostly due to human contact. Which explains why snakes are more terrified of humans than we are of them. (This often being the reason for them to attack!). Snakes are defenceless on the road, a place where these cold-blooded creatures are often found warming up. Sadly, it's here where 4X4s and motor vehicles annihilate them - churning out more and more road kill snake patties than ever before. And still, most people fear these reptiles due to a lack of understanding and information of the creatures – leading to dire consequences for humans and snakes.

That's why CapeNature issued the following tips to remind everyone that there are volunteers and experts available who are authorised to capture, remove and release reptilian visitors.

These are the steps to take when you're confronted with a snake, or other reptiles:

When coming across a snake, do not interfere with the snake in any way – only observe it from a distance. This will help the snake capturer quickly find and remove the snake, which the handler will release in its natural habitat.

How to keep safe

If you come across a snake in a residential area, do not remove it yourself. Call your nearest CapeNature office (view numbers below) or nearest nature conservation authority and they will put you in contact with an authorised snake handler.

Keep your distance from the snake.

Watch its movement and note what it is doing and where it is going.

Clear the area and keep dogs away from the snake.

In the event of a snake bite DO:

Phone Tygerberg Hospital Poison Hotline on 021 913 2010 for advice snake bites.

It is very important to know what type of snake is involved. Keep the victim calm and immobilized. If the bite is on the arm or leg, take the victim to the nearest hospital as soon as possible.

If the victim is struggling to breath or stops breathing, use CPR or artificial respiration. You will be required to provide as much information on the incident as possible (time of the bite and type of snake involved) to the Doctors and emergency services. A non-venomous snakebite will also cause the patient to show symptoms of shock and anxiety.

In the event of a snake bite DO NOT:

Cut or suck venom from the wound – it will not help.

Use ice or very hot water.

Give the victim alcohol – this makes the venom spread faster.

Apply electric shock.

Use anti-venom randomly. A doctor in a hospital must administer anti-venom. If done in an incorrect way it can lead to severe allergic reaction, anaphylactic shock or further complications for the patient.

15 – GLOBAL WARMING UPDATE

Countries agree on climate change accord, News 24; 12 Dec 2015.

Le Bourget - French hosts submitted to cheers and applause on Saturday a proposed 195-nation accord to curb emissions of the heat-trapping gases that threaten to wreak havoc on Earth's climate system.

Foreign Minister Laurent Fabius, on the brink of tears after presiding over nearly a fortnight of talks in Paris that ran into overtime, delivered the draft accord to ministers who must now decide whether or not to approve it, hopefully within hours.

"It is my conviction that we have come up with an ambitious... agreement," Fabius said, telling the ministers they would achieve a "historic turning point" for the world if they endorsed it.

The hoped-for deal seeks to end decades-long rows between rich and poor nations over how to prosecute the war on climate change.

With 2015 forecast to be the hottest year on record, world leaders and scientists have warned the accord is vital for capping rising temperatures and averting the most catastrophic consequences of a shifting climate.

French President Francois Hollande and UN Secretary-General Ban Ki-moon sat on stage alongside Fabius as he made a lengthy speech imploring ministers to approve the blueprint on Saturday.

Raising hopes of a successful conclusion, negotiators stood up and cheered before Fabius spoke, and rose in another standing ovation at the end.

The proposed agreement came after negotiators missed an initial deadline of Friday to sign an accord, as feuding ministers refused to budge on entrenched positions.

Enduring money battles

Developed and developing nations have failed for decades to sign an effective universal pact to tame global warming and shore up defences against its impacts.

They have been badly divided over how much responsibility each side must shoulder, an issue touching on interests worth trillions of dollars.

At the heart of any deal is cutting back or eliminating the use of coal, oil and gas for energy, which has largely powered nations' paths towards prosperity since the Industrial Revolution began in the 1700s.

The burning of fossil fuels releases greenhouse gases, which cause the planet to warm and change Earth's delicate climate system.

If climate change goes unabated, scientists warn of increasingly severe droughts, floods and storms, as well as rising seas that would engulf islands and populated coasts.

"Climate change represents an urgent and potentially irreversible threat to human societies and the planet," said the preface to an earlier version of the planned agreement.

Developing nations have insisted rich countries must shoulder the lion's share of responsibility for tackling climate change as they have emitted most of the greenhouse gases since the Industrial Revolution.

But the United States and other rich nations say emerging giants must also do more.

They argue that developing countries now account for most of today's emissions and thus will be largely responsible for future warming.

Legal obligations

Rich countries promised six years ago in Copenhagen to muster \$100 billion (92 billion euros) a year by 2020 to help developing nations make the energy shift and cope with the impacts of global warming. But how the funds will be raised remained unclear going into the Paris talks, and developing nations demanded clarity in the new accord, which would take effect from 2020.

Developing countries also demanded a commitment to increase the amount after 2020.

The United States has indicated it is willing to help mobilise the money, but has said it cannot accept proposals that the accord makes the financing obligations legally binding.

The proposed agreement was not available immediately after Fabius's speech.

But he said it would enshrine the annual \$100 billion as a "floor" -- a minimum for the future.

Ahead of the talks, most nations submitted voluntary plans to curb greenhouse gas emissions from 2020, a process widely hailed as an important platform for success.

But scientists say that, even if the pledges were fully honoured, Earth would be on track for warming far above safe limits. Hopes for lowering the trajectory lie with a so-called ratchet mechanism by which future pledges will reduce emissions.

Nations most vulnerable to climate change have lobbied hard for wording in the Paris pact to limit warming to 1.5 degrees Celsius (2.7 degrees Fahrenheit), warning otherwise rising sea levels would wipe out islands.

Big polluters, such as China, India and oil producing-giant Saudi Arabia, preferred a ceiling of 2C which would allow them to burn fossil fuels for longer.

Fabius indicated the vulnerable nations would win the battle, saying the planned agreement would enshrine a target of "well" below 2C, but also aim for 1.5C.

But after viewing earlier drafts, scientists warned other key wordings in the text did not outline strong enough plans for how much to cut greenhouse gases and when, which would allow global warming to continue on a dangerous path.

Global climate deal: In summary *BBC News, 12 December 2015*

A global climate agreement has been finalised in Paris. What has been agreed? Overview

The deal unites all the world's nations in a single agreement on tackling climate change for the first time in history.

Coming to a consensus among nearly 200 countries on the need to cut greenhouse gas emissions is regarded by many observers as an achievement in itself and is being hailed as "historic".

The Kyoto Protocol of 1997 set emission cutting targets for a handful of developed countries, but the US pulled out and others failed to comply.

However, scientists point out that the Paris accord must be stepped up if it is to have any chance of curbing dangerous climate change.

Pledges thus far could see global temperatures rise by as much as 2.7C, but the agreement lays out a roadmap for speeding up progress.

What are the key elements?

To keep global temperatures "well below" 2.0C (3.6F) and "endeavour to limit" them even more, to 1.5C

To limit the amount of greenhouse gases emitted by human activity to the same levels that trees, soil and oceans can absorb naturally, beginning at some point between 2050 and 2100

To review each country's contribution to cutting emissions every five years so they scale up to the challenge

For rich countries to help poorer nations by providing "climate finance" to adapt to climate change and switch to renewable energy.

What's in and what has been left out?

The goal of preventing what scientists regard as dangerous and irreversible levels of climate change - judged to be reached at around 2C of warming above pre-industrial times - is central to the agreement. The world is already nearly halfway there at almost 1C and many countries argued for a tougher target of 1.5C - including leaders of low-lying countries that face unsustainable sea levels rises in a warming world.

The desire for a more ambitious goal has been kept in the agreement - with the promise to "endeavour to limit" global temperatures even more, to 1.5C.

Dr Bill Hare, CEO of Climate Analytics, says the objective is "remarkable".

"It is a victory for the most vulnerable countries, the small islands, the least developed countries and all those with the most to lose, who came to Paris and said they didn't want sympathy, they wanted action." Meanwhile, for the first time, the accord lays out a longer-term plan for reaching a peak in greenhouse emissions "as soon as possible" and achieving a balance between output of man-made greenhouse gases and absorption - by forests or the oceans - "by the second half of this century".

"If agreed and implemented, this means bringing down greenhouse-gas emissions to net zero within a few decades. It is in line with the scientific evidence we presented," says John Schellnhuber, Director of the Potsdam Institute for Climate Impact Research.

Some have described the deal as "woolly" because some of the targets were scaled down during the negotiations.

"The Paris Agreement is only one step on a long road, and there are parts of it that frustrate and disappoint me, but it is progress," says Greenpeace International executive director Kumi Naidoo.

"This deal alone won't dig us out the hole we're in, but it makes the sides less steep."

What about money?

Money has been a sticking point throughout the negotiations.

Developing countries say they need financial and technological help to leapfrog fossil fuels and move straight to renewables.

Currently they have been promised US \$100bn (£67bn) a year by 2020 - not as much as many countries would like.

The agreement requires rich nations to maintain a \$100bn a year funding pledge beyond 2020, and to use that figure as a "floor" for further support agreed by 2025.

The deal says wealthy countries should continue to provide financial support for poor nations to cope with climate change and encourages other countries to join in on a voluntary basis.

Dr Ilan Kelman of UCL, London, says the lack of time scales are "worrying".

"The starting point of \$100bn per year is helpful, but remains under 8% of worldwide declared military spending each year."

What happens next?

Only elements of the Paris pact will be legally binding.

The national pledges by countries to cut emissions are voluntary, and arguments over when to revisit the pledges - with the aim of taking tougher action - have been a stumbling block in the talks.

The pact promises to make an assessment of progress in 2018, with further reviews every five years.

As analysts point out, Paris is only the beginning of a shift towards a low-carbon world, and there is much more to do.

"Paris is just the starting gun for the race towards a low-carbon future," says WWF-UK Chief Executive David Nussbaum.

Prof John Shepherd of the National Oceanography Centre, University of Southampton, says the agreement includes some welcome aspirations but few people realise how difficult it will be to achieve the goals.

"Since the only mechanism remains voluntary national caps on emissions, without even any guidance on how stringent those caps would need to be, it is hard to be optimistic that these goals are likely to be achieved."

16 – WE HAVE 15 YEARS TO HALT BIODIVERSITY LOSS. CAN IT BE DONE?

October 27, 2015 | by Richard Pearson

The UN's ambitious new <u>Sustainable Development Goals</u> include a target to halt biodiversity loss by 2030. The SDGs have generated a great deal of <u>comment</u>, with <u>questions raised</u> as to whether the lofty aspirations can be turned into realistic policies. An <u>article in The Lancet</u>even dismissed the SDGs as nothing more than "fairy tales". So, is halting biodiversity loss a fairy tale?

"Biodiversity" refers to the diversity of life on Earth. It includes diversity within species, between species, and of ecosystems. There are any number of statistics that confirm its decline across the globe. For instance, the Red List of threatened species, developed by the International Union for the Conservation of Nature (IUCN), identifies 22,784 that are at risk of extinction – almost 30% of the species that have been assessed. By other measures, habitats continue to be destroyed and degraded, and population sizes of most wild species are in decline.

This is bad news not only for nature lovers but for all of us since we rely on biodiversity to deliver many crucial services such as pollinating crops and providing medicines. By projecting current trends forward in time, a study <u>published in Science last year</u> concluded we are already on course to miss most of the international community's other main targets for biodiversity – the "<u>Aichi Targets</u>" – which were adopted in 2010 under the Convention on Biological Diversity (CBD) and aspire to improve things by 2020. So why might the new SDG biodiversity target be any more achievable than those that have gone before?

The inclination is to be extremely pessimistic, but there are some reasons to be hopeful.

The same <u>Science paper</u> also looked at indicators of societal responses to the biodiversity crisis. Here the trends are much more in the right direction. Coverage of protected areas is increasing across the planet, sustainable management practices in industries such as fishing and forestry are taking root, and public awareness of biodiversity issues is rising.

There has been real progress in the policy arena. To date 184 of 196 parties to the CBD have developed National Biodiversity Strategies and Action Plans, which set out actions such as promoting laws and providing funds to help achieve the convention's goals. The establishment in 2012 of the Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services (IPBES) also provides an important new mechanism to inject sound scientific advice into policy making.

In business as well, biodiversity conservation and the related concept of "natural capital" are becoming mainstream. For instance, the <u>Natural Capital Coalition</u> is developing the economic case for valuing natural ecosystems and includes buy-in from some of the biggest players in business, accountancy and consulting.

And the financial industry is moving toward more responsible investing. The <u>UN Principles for Responsible Investment</u>, which commit investors to act in accordance with conventions such as the CBD, now has almost 1,400 signatories who manage assets with a combined total of <u>US\$59 trillion</u>.

These are major positive changes that have come to the fore in the past decade or so. And there are conservation success stories that illustrate how such changes can turn things around for biodiversity. For example, the latest <u>update to the IUCN Red List</u> reports that conservation action has bolstered populations of the Iberian lynx, which had only 52 mature individuals in 2002. And the Guadalupe fur seal, which had twice in the past been thought to have gone extinct due to hunting, is also making a comeback.

More generally, there is an overall <u>positive trend</u> among populations of almost 1,000 bird and mammal species across much of the northern hemisphere.

These instances of good news still leave us a long way from halting global biodiversity loss. I don't mean for a moment to underestimate the magnitude of the problem. Habitat loss, climate change, pollution, overexploitation and the spread of invasive species all remain huge threats that will require extraordinary efforts to tackle.

But time has not yet run out. Although many plants and animals are threatened with extinction, we have in fact lost only <u>a few percent</u> of known species over recent centuries. It is heartening that there is still an astonishing amount left to save.

It will take time to slow and turn around the juggernaut that is biodiversity loss, and everyone must pull in the same direction in order to shift course. The period over which the new SDGs will run, from now until 2030, will be absolutely crucial for making this happen.

There are indications that things are beginning to turn around. Hints that we can do this. It would be a big mistake to dismiss the biodiversity target as a fairy tale.

And anyway, fairy tales usually have happy endings, don't they?

17 – MCS APPAREL

You are reminded that the Society has a stock of fleece sleeveless jackets, in olive green with orange MCS logo. They are ideal for the cool mornings and evenings. These are available at \$20 each. We still have stocks of hats and caps (at \$10 each). CD's are also available.

18 – HAVE YOU PAID YOUR SUBSCRIPTION?

You are reminded that subscriptions for the year 1 October 2015 to 30 September 2016 fell due on 30 September. Please ensure that your subs are up to date. There has been no increase in rates.

US\$ 20 Individual/Family
US\$ 5 Special Member (Pensioner/Student)
US\$100 Corporate