



ENVIRONMENT

Working to keep tapestry of life intact

MICHAEL SAMWAYS

EVERY year on May 22 we celebrate the International Day of Biological Diversity.

The theme for 2022 – “Building a shared future for all life” – reminds us that the fates of insects and humans are entwined. Their future is our future. The reason for this is that while we may see an occasional butterfly flutter past or a bee drinking from a flower, there are a myriad of them and other little creatures busy at work pollinating flowers, engaged in soil formation and keeping pests at bay.

This unseen multitude is busy working day and night to keep the tapestry of life intact, not least because they are also food items for fish, frogs, lizards and many birds.

Yet the insect world is in crisis as their populations plummet in many parts of the world.

Decreases are particularly severe where humans intensely modify and manage landscapes, whether in an agricultural or urban setting.

Saving insects involves in part a global response, while on the other hand the response must be tailored to address local impacts which vary from place to place.

The global response means the sharing of findings on types of stress upon insects and how they respond to them.

By sharing information across the world, we can speed up the search for effective insect conservation solutions.

There must then be a local overlay of an understanding of how local insects respond according to their past evolutionary history. Then there is the social context, with different countries and locations having their own ways of ensuring that both insects and people share a brighter future on a platform of scientific insight and political will.

This means that besides knowing our insects, we then need to find ways forward that fit in with the aspirations of land stewards and landowners, as well as with conservation authorities.

Today, we have sufficient knowl-



THE honey bee's plant pollination function is as important to agriculture as water, land and air. | IAN LANDSBERG African News Agency (ANA)

edge to save many insects and other small creatures with constructive and effective strategies for both land and freshwater environments.

South Africa is very special as it has a huge wealth of insects as well as many other organisms.

The main reason for this is that the country has not been pumelled by glacial ice sheets for over 200 million years. This escape is coupled with the country having a highly varied set of mountains and other landforms alongside a wide array of climatic conditions that has generated a great variety of ecosystems.

In short, South Africa has much of what scientists term “irreplaceable biodiversity”, that is, a host of organisms that are found here and nowhere else.

We do not want to lose these insects and other organisms, otherwise

we would unravel that tapestry of life.

Nowhere is this more apparent than among the great variety of flowering plants and their pollinating insects.

This is emphasised by South Africa being home to three of the world's 36 biodiversity hot spots, areas of exceptionally high biodiversity that require diligent conservation for the benefit of all.

Two of the biodiversity hot spots have enough rainfall to support thriving agriculture and forestry.

In the Mediterranean-type climate of the Cape Floristic Region biodiversity hot spot, there are various types of agriculture. Viticulture predominates in parts of the region, which has the highest biodiversity, both of plants and insects. This means that saving the insects is closely associated with saving the plants. Vineyards in

recent years have become much more biodiversity-friendly, largely thanks to the Integrated Production of Wine initiative. Vineyards have moved away from intense management to a much more natural approach. Vegetation is planted in and among vine rows, pesticide applications are minimal, tillage rarely used, and natural fertilisers are applied. This leads to a great improvement in the on-farm insect diversity.

This approach is coupled with maintaining islands of natural vegetation which supplement the more extensive protected areas. Managing the overall landscape in this way is seeing many insects benefit greatly.

In the high rainfall areas farther north, commercial forestry is widely practised. But the way it is done is interesting and very effective for supporting so many insects and other

organisms. This is achieved by setting aside land as huge networks of interconnected conservation corridors of natural grassland, forest and wetland.

These corridors also connect with protected areas and the whole landscape enables survival of much insect diversity while also enabling productive forestry. It is a win-win situation for both people and insects, and for many other organisms besides.

While on the face of it fires would seem to be a great problem, this is not actually the case.

This is because the insects are well adapted to fire events, having adapted to them for many millennia.

When a fire passes through it always leaves patches unburned. These patches might be rocky areas, tops of hills, or ravines.

The plants are also well adapted to fire and soon regenerate following the fire and especially once the rains come. The insects then spread out from their fire refuges to colonise the resprouting and flowering plants.

In contrast to fire, invasive alien plants, especially alien trees, can have a devastating effect on the local insects, especially along watercourses.

The local insects are adapted to sunny conditions and are excluded by the shady canopies of the invasive trees. However, the Working for Water programme, which was originally put in place to improve water delivery and to supply jobs, has had a highly beneficial effect on the insects.

Even many highly localised species have recovered through tree removal. In the case of dragonflies, some very rare and localised species have quite literally been saved from extinction.

All these various strategies have been highly effective at conserving insects while also improving people's livelihoods and well-being. The future is ours, so long as we aim to work in harmony with nature, including living alongside all the little creatures.

Samways is Emeritus Distinguished Professor in the Department of Conservation Ecology and Entomology at Stellenbosch University.



RECIPE Minestrone soup

- INGREDIENTS**
 2 tbsp (30ml) olive oil
 2 onions, roughly chopped
 4 sticks celery, sliced
 6 carrots, sliced
 4 cloves garlic, grated
 8 sprigs fresh thyme
 1 large packet (100g) tomato paste
 5-6 cups (1.25-1.5 litres) vegetable or beef stock
 1 can (400g) chopped and peeled tomatoes
 Salt and milled pepper
 1 cup (150g) pasta
 1 packet (300g) green beans, sliced into 2cm pieces
 6 baby marrows, roughly sliced
 ½ packet (150g) Swiss chard or kale, shredded
 1 can (400g) cannellini beans, drained and rinsed
 Grated Parmesan, for serving
 Buttered sourdough bread or crusty rolls, for serving

- METHOD**
 Heat oil in a pot and brown onions, celery and carrots.
 Add garlic and thyme and fry for a minute.
 Add tomato paste and cook until sticky.
 Pour in stock and tomatoes. Season, and simmer for 10 to 15 minutes.
 Add pasta, green beans and marrows, and cook for 8 minutes.
 Stir in Swiss chard or kale and cannellini beans and heat through. Season.
 Serve soup topped with Parmesan and with sourdough bread or rolls on the side.

| PICK N PAY

THURSDAY | MAY 19

05:00 Clean Green Living 05:30 BBC Life Clinic (R) 06:00 Healthy Living 06:30 Cape Town Daily (R) 07:30 The Fazlavi Show (R) 08:00 The Faith Show 08:30 TED 09:00 Hype It Up – Homegrown (R) 10:00 Mathata (R) 10:30 8,000 KM of Love 11:00 Street Talk (R) 11:30 Aviator Girl. Ups and downs of a Pilot's Job 12:00 Al Jazeera International News 13:00 Democracy Now (R) 14:00 Community Action Networks 14:30 DW: Eco Africa 15:00 TechKnow 15:30 Spunky Sea Stories 16:00 The Crash Course 16:30 The Faith Show 17:00 Choir Vibes 17:30 Hype It Up – Homegrown 18:30 Phillip TV – Kasitainment Access 19:00 Cape Town Daily 20:00 Al Jazeera International News 21:00 The Womxn's Show (R) 22:00 Wings Are Not For Sale 23:30 Spirit Science – History of the Earth, World and Mankind

HEALTH

Second imported case of wild polio virus found in southern Africa

OWN CORRESPONDENT

HEALTH authorities in Mozambique have declared an outbreak of wild polio virus type 1 after confirming that a child in the country's north-eastern Tete province had contracted the disease.

This marks the second imported case of wild polio virus in southern Africa this year, following an outbreak in Malawi in mid-February.

One case in Mozambique – the country's first since 1992 – has been detected.

The virus was found in a child who began experiencing onset of paralysis in late March. Genomic sequencing analysis indicates that the newly confirmed case is linked to a strain that had been circulating in Pakistan in 2019, similar to the case reported in Malawi earlier this year.

The case in Mozambique and the earlier one in Malawi do not affect

Africa's wild polio virus-free certification because the virus strain is not indigenous. Africa was declared free of indigenous wild polio in August 2020 after eliminating all forms of wild polio from the region.

“The detection of another case of wild polio virus in Africa is greatly concerning, even if it's unsurprising given the recent outbreak in Malawi. However, it shows how dangerous this virus is and how quickly it can spread,” said Dr Matshidiso Moeti, World Health Organization regional director for Africa. “We are supporting southern African governments to step up the polio fight including carrying out large-scale, effective vaccination campaigns to halt the virus and protect children from its damaging impact.”

Further investigations are under way in Mozambique to determine the extent of the risk posed by the new wild polio virus case and the targeted responses needed. Preliminary analysis

of samples collected from three contacts of the newly detected case were all negative for wild polio virus type 1.

Mozambique recently carried out two mass vaccination campaigns – in response to the Malawi outbreak – in which 4.2 million children were vaccinated against the disease.

Efforts are under way to help strengthen disease surveillance in Malawi, Mozambique, Tanzania, Zambia and Zimbabwe. The five countries will continue with mass vaccinations, with plans to reach 23 million children aged five years and below with the polio vaccine in the coming weeks.

Polio is highly infectious and largely affects children younger than five years. There is no cure for polio, and it can only be prevented by immunisation. Children across the world remain at risk of wild polio type 1 as long as the virus is not eradicated in the last remaining areas in which it is circulating.

WEATHER OUTLOOK

Today's Forecast

Cape Town City: 12/16 - Light rain, 30%.
Cape Flats: 11/17 - Light rain, 30%.
Alexander Bay: 13/16 - Cloudy.
Beaufort West: 12/16 - Rain showers, 60%.
Calvinia: 11/14 - Rain showers, 30%.
Cianwilliams: 13/19 - Light rain, 30%.
George: 11/15 - Rain showers, 80%.
Grabouw: 11/16 - Rain showers, 30%.
Hermanus: 14/18 - Light rain, 30%.
Langebaan: 11/16 - Rain showers, 30%.
Malmesbury: 10/18 - Rain showers, 30%.
Mossel Bay: 11/15 - Rain showers, 80%.
Oudtshoorn: 13/16 - Rain showers, 60%.
Paarl: 11/18 - Rain showers, 30%.
Plettenberg Bay: 13/17 - Rain showers, 80%.
Riversdale: 12/15 - Rain showers, 60%.
Robertson: 13/18 - Rain showers, 60%.
Springbok: 12/14 - Cloudy.
Sutherland: 6/11 - Rain showers, 30%.
Vredendal: 13/20 - Light rain, 30%.
Worcester: 13/19 - Rain showers, 60%.

Tides Table Bay

Today		Tomorrow	
High:	05:09 & 17:40	Low:	05:58 & 18:32
Low:	11:25 & 23:45	High:	11:25 & 12:16
Sunrise:	07:34	Sunrise:	07:35
Sunset:	17:50	Sunset:	17:50
Moonrise:	21:05	Moonrise:	22:15
Moonset:	11:16	Moonset:	12:13

Moon Phases

Last Quarter	May 22
New Moon	May 30
First Quarter	June 07
Full Moon	June 14

UV Levels Low

Best time to Fish **02:35 - 04:35**
15:10 - 17:10

FRIDAY'S FORECAST

Friday: 11/16
Partly cloudy. Wind S 18km/h.

Saturday: 10/17
Clear skies. Wind W 8km/h.

Sunday: 12/17
Clear skies. Wind NW 19km/h.

Monday: 13/18
Light rain, 30%. Wind WNW 19km/h.

Outlook for Cape Town

Friday: 11/16
Partly cloudy. Wind S 18km/h.

Saturday: 10/17
Clear skies. Wind W 8km/h.

Sunday: 12/17
Clear skies. Wind NW 19km/h.

Monday: 13/18
Light rain, 30%. Wind WNW 19km/h.

Outlook for George

Friday: 9/14
Rain showers, 30%. Wind SW 19km/h.

Saturday: 9/16
Clear skies. Wind SW 8.

Sunday: 11/19
Clear skies. Wind SW 8.

Monday: 12/22
Cloudy. Wind W 13km/h.

Yesterday's Reading

Barometer:	None	8pm:
Humidity:	n/a	n/a
Temp:	n/a	n/a

At Cape Town International Airport:
Min: n/a Max: n/a Wind at 6pm: n/a

National Min/Max temps

Bloemfontein	8 21	Mafikeng	10 22	Pretoria	9 21
Durban	18 26	Mbombela	13 27	Richards Bay	18 29
East London	13 23	Matielas	13 26	Rustenburg	9 21
Optima	12 19	Pullmoos	8 21	Sagehen	6 27
Johannesburg	7 18	Pietermaritzburg	10 27	Vereeniging	7 20
Kimberley	10 23	Pretoria	9 22	Vryburg	11 23

International Min/Max temps

Atlanta	20 32	London	12 21	New York	16 24
Buenos Aires	9 15	Los Angeles	18 25	Paris	16 26
Frankfurt	17 28	Mecca	29 43	Perth	13 22
Hong Kong	24 27	Nairobi	13 28	Rio de Janeiro	17 23
Jerusalem	18 27	New Delhi	30 44	Rome	13 28

Storage levels 16th May 2021-2022

Capacity-Ml	2021	2022
Berg River Dam	130 010	75.7%
Steenbras Lower	35 517	57.7%
Steenbras Upper	31 767	52.6%
Thesewaterskloof	480 188	74.8%
Voelvlei	184 095	58.4%
Wammershoek	58 844	59.0%
Total Storage	888 221	69.5%

SunSquare Cape Town City Bowl

- A CITY HOTEL FOR THE NEW GENERATION

WITH so much to do and see when visiting the city of Cape Town, a central location is the ideal choice. Situated on the corner of Buitengracht and Strand Streets, SunSquare Cape Town City Bowl hotel combines a design edge with modern city hotel amenities, TripAdvisor Travellers' Choice awarded accommodation, and affordability in the very heart of Cape Town.

Accommodation at SunSquare Cape Town City Bowl provides the comfort of home together with contemporary style and all the amenities you need for work or play, with exceptional views of the harbour, the city, or Table Mountain to enhance your Cape Town experience.

Adjacent to the vibey Bree Street scene is the hotel's hip all-day dining restaurant, Vigour & Verve. With a massive wood-fired pizza oven and funky feel-good atmosphere, it's the perfect place to grab a meal and chill. If it's cocktails and uninterrupted views that you're after, head up to the 14Stories Rooftop Bar, the best spot in the city for drinks overlooking Table Mountain, Signal Hill and the V&A Waterfront. Rain or shine, 14Stories has you covered with an outdoor deck and an indoor lounge surrounded with panoramic windows.

Stay over at SunSquare Cape Town City Bowl and enjoy a swim or a workout with a panoramic view at the 14th floor pool and residents-only gym. Experience life and discover Cape Town's vibrant SunSquare Cape Town City Bowl hotel.

Visit southern.sun.com for more information.

WIN WIN WIN

Stand a chance to win a 2-night stay for 2 people at Sun Square Cape Town City Bowl valued at R8 500 in our May Mother's Month Giveaway.

1. To enter SMS: CTHotel, followed by your name, and email address to 33258.
2. The competition closes on Sunday, 22 May at 9 am.
3. Winners will be notified via email.
4. SMS costs R1.50.
5. The prize is non-exchangeable, non-transferable and not redeemable for cash or other prizes.
6. Terms and conditions apply.