

Biodiversity 101

Your complete beginner guide



LEARN MORE



What you get

1. Definition
2. Types
3. Why Important
4. Current state
5. Cause of decline
6. Useful resources
7. What you can do

Definition

Biodiversity refers to the variety of living things, both big & small, that exist on Earth.

[Link](#)



A misty forest landscape with a white rounded rectangle overlay containing text. The background shows a dense forest of evergreen and deciduous trees, with mist or fog partially obscuring the upper parts of the trees. The text is centered within the white rectangle.

3 Types of Biodiversity

1. Species Diversity

This refers to the variety of different species that exist on Earth.

It includes all the different types of plants, animals, fungi, and microorganisms.

A misty forest landscape with a white rounded rectangle overlay containing text. The background shows a dense forest of evergreen trees under a hazy sky. The text is centered within the white box.

2.

Genetic Diversity

This type of biodiversity focuses on the variety of genes within a particular species.

Genes determine the traits and characteristics of living organisms.



3.

Ecosystem Diversity

Ecosystems are made up of living organisms & their physical surroundings, such as forests, coral reefs, grasslands & lakes.

Ecosystem diversity refers to the variety of different ecosystems in a given area or on the planet as a whole.



? Why is
Biodiversity
important?

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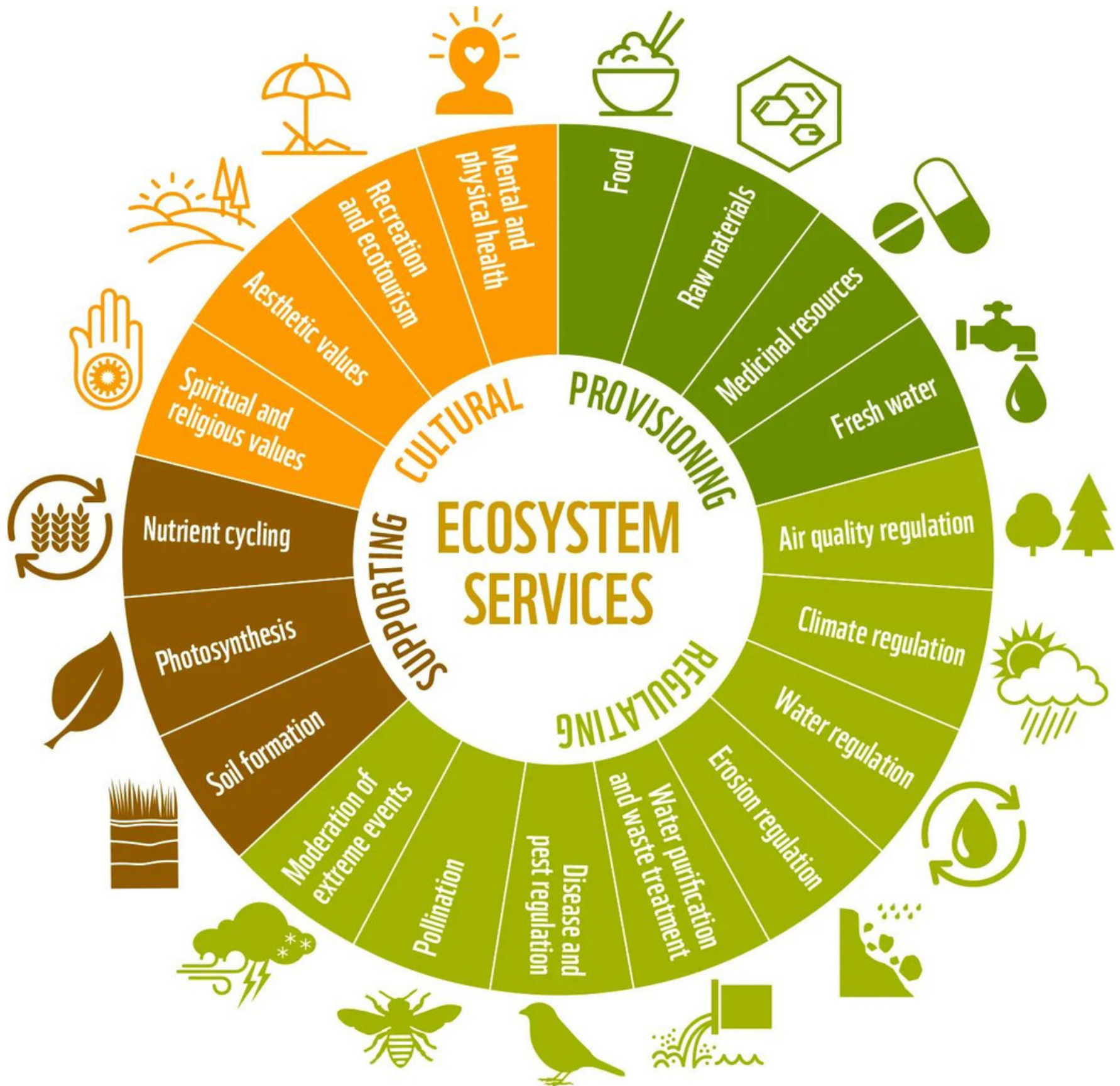
GDP

Or over half the world's total GDP – is moderately or highly dependent on nature and its services.

Construction (\$4 trillion), agriculture (\$2.5 trillion) & food (\$1.4 trillion) are the 3 largest industries that depend most on nature.

[Link](#)

But there is more:



[Link](#)

What's the
current state of
Biodiversity?

Sh#t

And that is a nice way of
saying it.

Species Extinction Rates

It is estimated that the current rate of species extinction is between 1,000 & 10,000 times higher than the natural extinction rate before human influence.

[*Link*](#)

Decline in Populations

According to a report by the WWF, global populations of mammals, birds, fish, reptiles, & amphibians have declined by an average of 68% between 1970 & 2016.

[Link](#)

Loss of habitat

Habitat destruction is a major driver of biodiversity loss.

It is estimated that around 80% of Earth's land surface has been significantly impacted by human activities.

[Link](#)

1 000 000

1 million species (or approximately 1 in 8 known species) are at risk of extinction if current trends continue.

[Link](#)



What is causing
this?

Changing use of land & sea

The biggest driver of biodiversity loss is the way in which people use the land & sea.

How we grow food, harvest materials such as wood or minerals from the ocean floor, & build our cities.

[Link](#)



Direct Exploitation or organisms

Overfishing is happening at such a large scale, nearly a third of all monitored global fish stocks are now overfished.

[Link](#)



Climate Change

Some species are dying out while others are having to move where they live due to changes in air temperature, weather patterns, & sea levels.

[Link](#)



Pollution

Pollution has reached all types of ecosystems, even those in remote areas.

Pollution comes in many forms - from nitrogen & ammonia, caused by intense agriculture, to microplastics found in the deepest parts of the ocean.

[Link](#)



Invasive non-native species

Are those that arrive in places where they historically didn't live, & out-compete local biodiversity for resources such as sunlight and water.

This causes the native species to die out.

[Link](#)





What you can do



*“Only if we understand,
can we care.*

*Only if we care, we will
help.*

*Only if we help, we shall
be saved.”*

-Jane Goodall



Awareness & Education



3 Concepts you need to know

1. Shifting Baseline Syndrome

When people think that degraded & damaged environments are normal because they haven't experienced or don't remember what a healthy & diverse environment should be like.

[Link](#)

2. Web of Life

The web of life is like a giant puzzle where every living thing, from plants to animals, is a piece that fits together.

Each piece depends on the others to survive and thrive. If one piece is missing or gets damaged, it affects the whole puzzle. (Spoiler we f#cked up this puzzle)

[Link](#)

3. Rewilding

Giving nature more freedom to be wild & taking a step back from controlling it too much. It involves bringing back plants & animals that used to live in an area & letting them take care of themselves.

By doing this, we can help nature become healthier & more balanced.

[Link](#)

An aerial photograph of a dense, lush green forest. The trees are packed closely together, creating a rich texture of various shades of green. In the center of the image, there is a large, white, rounded rectangle that serves as a background for the text. The text is written in a warm, orange-brown serif font.

3 books to read

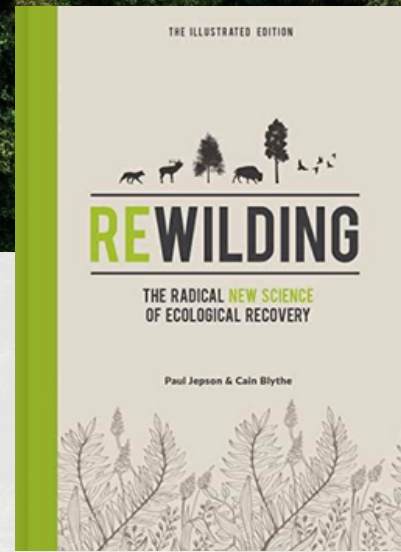
A Life on
Our Planet
My Witness Statement
and Vision for the Future
David
Attenborough



1. A Life on our planet by David Attenborough

Great sum up why protecting
nature is not a nice to have,
but desperately needed.

[Link](#)



2. Rewilding by Paul Jepson & Cain Blythe

Rewilding is one of the best approaches to solving multiple crises simultaneously.

[Link](#)



3. Tapestries of Life by Anne Sverdrup Thygeson

Nature is incredible and this book easily shows you how much we benefit from it.

[Link](#)

An aerial photograph of a rocky coastline with clear, shallow water. A semi-transparent white rectangular overlay with rounded corners is centered on the image. The text "3 Goats!" is written in a bold, orange, sans-serif font within this overlay. The background shows a dense line of green trees and bushes along the shore, with numerous large, smooth, grey rocks scattered along the water's edge and in the shallow water.

3 Goats!



1. David Attenborough

The voice behind every nature documentary you probably have watched.

Still going strong to protect wildlife around the world.

[Link](#)



2. Jane Goodall

Most famous for her work with chimpanzees and founder of the Roots & Shoots program that empowers young people around the world

[Link](#)



3. Sylvia Earle

Ocean legend that committed her entire life to protect life under the surface. Founder of Mission Blue.

[Link](#)

A photograph of a whale breaching the ocean surface, with a white rounded rectangle overlaid on the image containing text.

3 people to
follow



1. Belinda Bramley

Environmentalist. Ocean solutions consultant. Your source for ocean-related news & actions.

[Link](#)



2. Cain Blythe

CEO / Founder at
CreditNature & Ecosulis.
Rewilding Expert.

[Link](#)



3. Ralph Chami

Co-Founder Blue Green Future, LLC and Rebalance Earth.

Specialist that shows the economical benefit of thriving nature.

[Link](#)

3 historical
figures



1. Alexander von Humboldt

German naturalist & explorer, made significant contributions to our understanding of the natural world.

[Link](#)



2. Charles Darwin

English naturalist, is best known for his groundbreaking work on the theory of evolution through natural selection.

[Link](#)



3. Carl Linnaeus

Swedish botanist, physician, & zoologist, is widely regarded as the father of modern taxonomy. His work laid the foundation for the hierarchical classification system.

[Link](#)

A close-up photograph of a coral reef structure, showing intricate, branching, and porous formations in shades of white and light brown. A white rounded rectangle is overlaid on the left side of the image, containing the text "3 institutions".

3 institutions

1.IPBES

Intergovernmental Science-Policy Platform on Biodiversity & Ecosystem Services. Established by the UN in 2012.

Mission is to provide policymakers with objective scientific assessments and expert advice on biodiversity.

[Link](#)

2. IUCN

International Union for Conservation of Nature. IUCN is a global organization dedicated to conserving nature and promoting sustainable development.

It is the world's largest and most diverse environmental network.

[Link](#)

3. CDB

Convention on biological diversity. Developed Kunming-Montreal Global Biodiversity Framework (GBF), which supports the achievement of the Sustainable Development Goals & sets out an ambitious pathway to reach the global vision of a world living in harmony with nature by 2050.

[Link](#)

A close-up photograph of a lion's face, focusing on its eyes and the texture of its fur. A white, rounded rectangular text box is centered over the image. The text "3 movies to watch" is written in a brown, serif font within this box.

3 movies to watch

1. Our Planet

Great sum up of everything you need to know for the start of your biodiversity journey.



[Link](#)

2. Virunga

A great documentary to see what protection of the last wild areas of this planet truly mean.



[Link](#)



3. Blue Planet

Showing what is going on below the surface. A life away from our shores.



[Link](#)



3 podcasts to listen
to

1. The Rewild Podcast

Great to dive into the topic of rewilding and travel the different projects within Europe. Hosted by James.



[Link](#)

2. Lifeworlds

Great to shift your perspective
about nature.



[Link](#)

3. Internet of Nature

Exploring the intersection of technology and nature.



[Link](#)

3 Interesting Companies



1.Ecosulis

Recovering nature, by designing
and delivering efficient &
scalable nature-based solutions
for people & planet.



ecosulis

[Link](#)

2. Internet of Elephants

Use real scientific data that is captured about individual animals in the wild, to tell wildlife stories through engaging digital experiences.



[Link](#)



3. Wilderlands

Protect Australia's biodiversity.
Forever.
One square metre at a time.



WILDERLANDS

[Link](#)



3 Apps



1. Merlin

Can't see the bird but hear it.
Just record the sounds to learn
more about your local friends.

Merlin[®]

[Link](#)



2. Wildya

Combining personal development & nature. 7min per day to grow your better & wilder self.

Wildya

[Link](#)



3. Seek

Just point your camera towards the animal or plant and learn more about it.



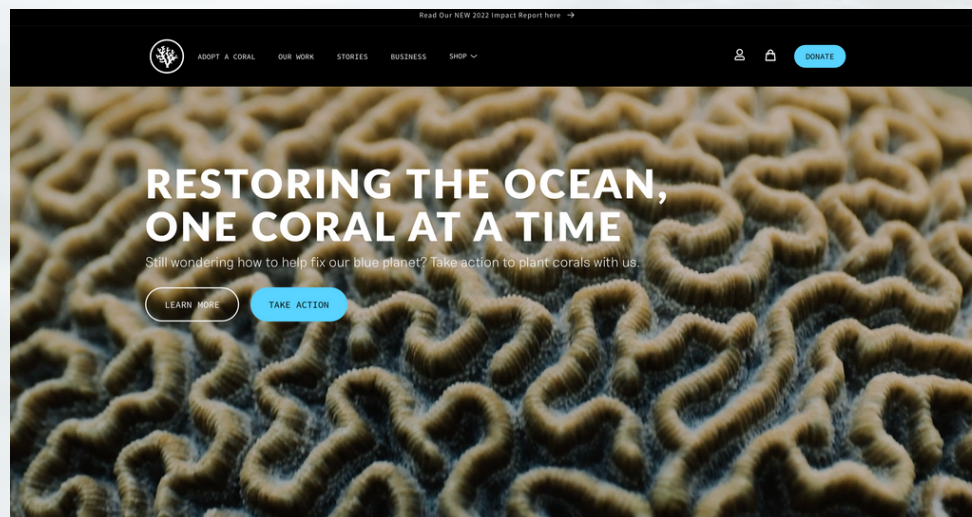
[Link](#)



3 NGO to support

1. Coral Gardeners

Helping corals in French Polynesia to recover.

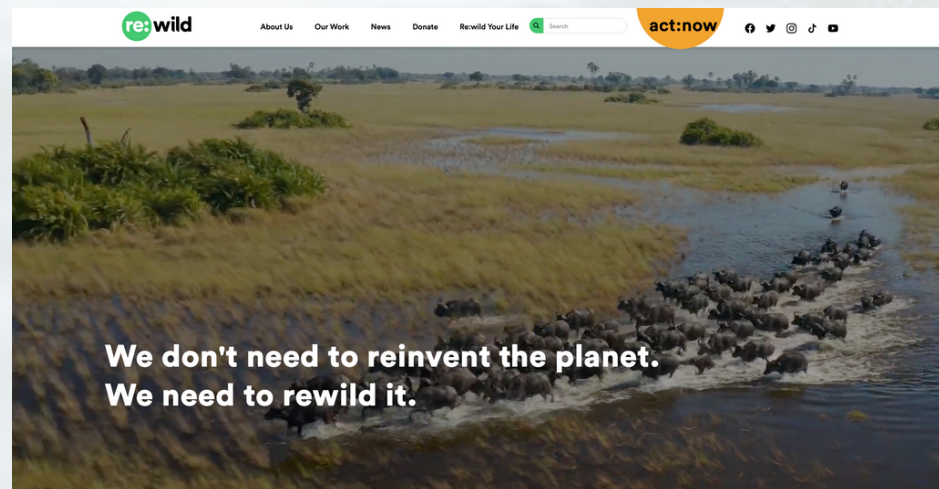


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2. Re:wild

Global Rewilding NGO pushing the concept far and wide.



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3. African Parks Network

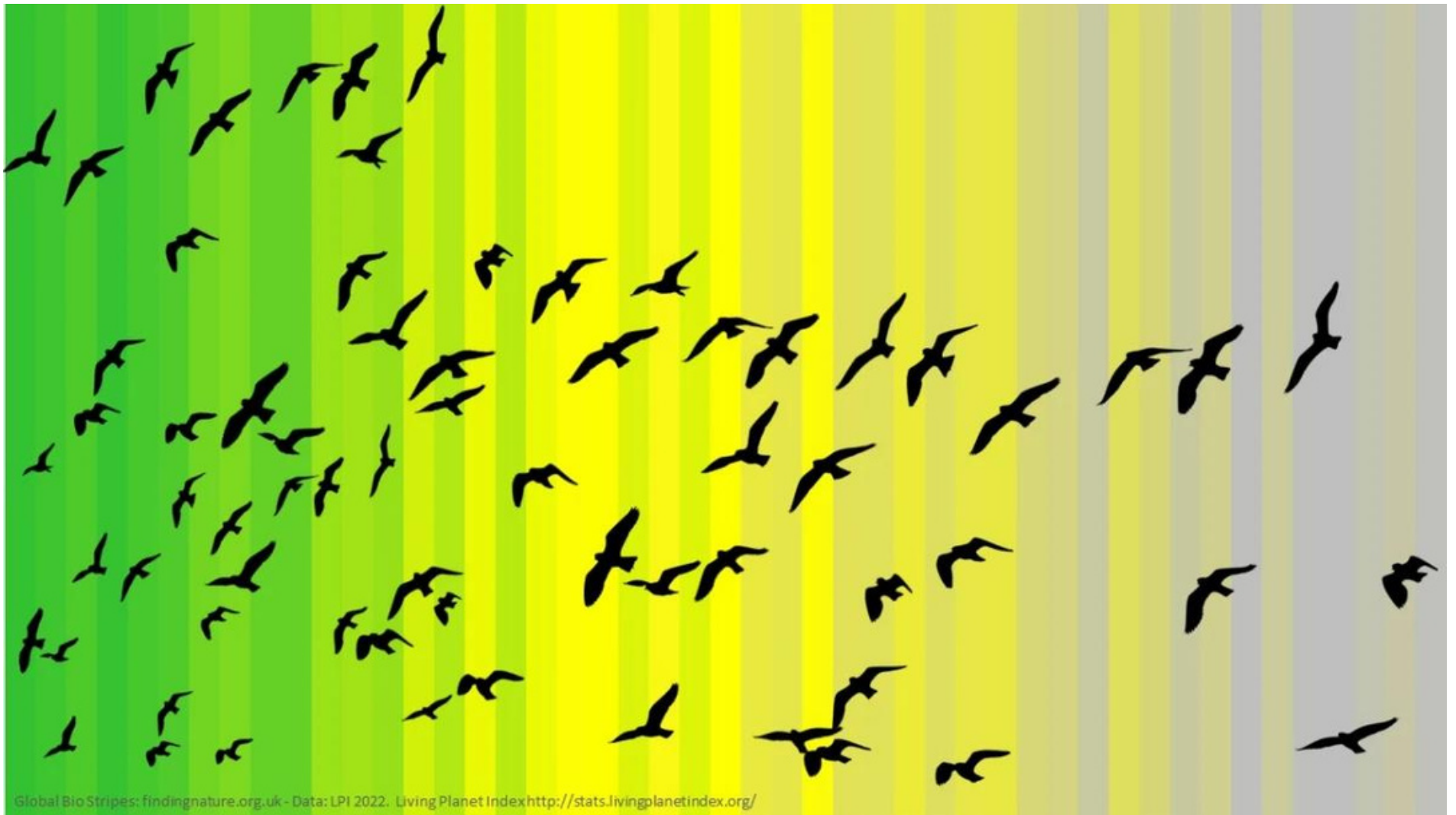
Supporting countries in Africa to protect their natural heritage, while creating opportunities for local people



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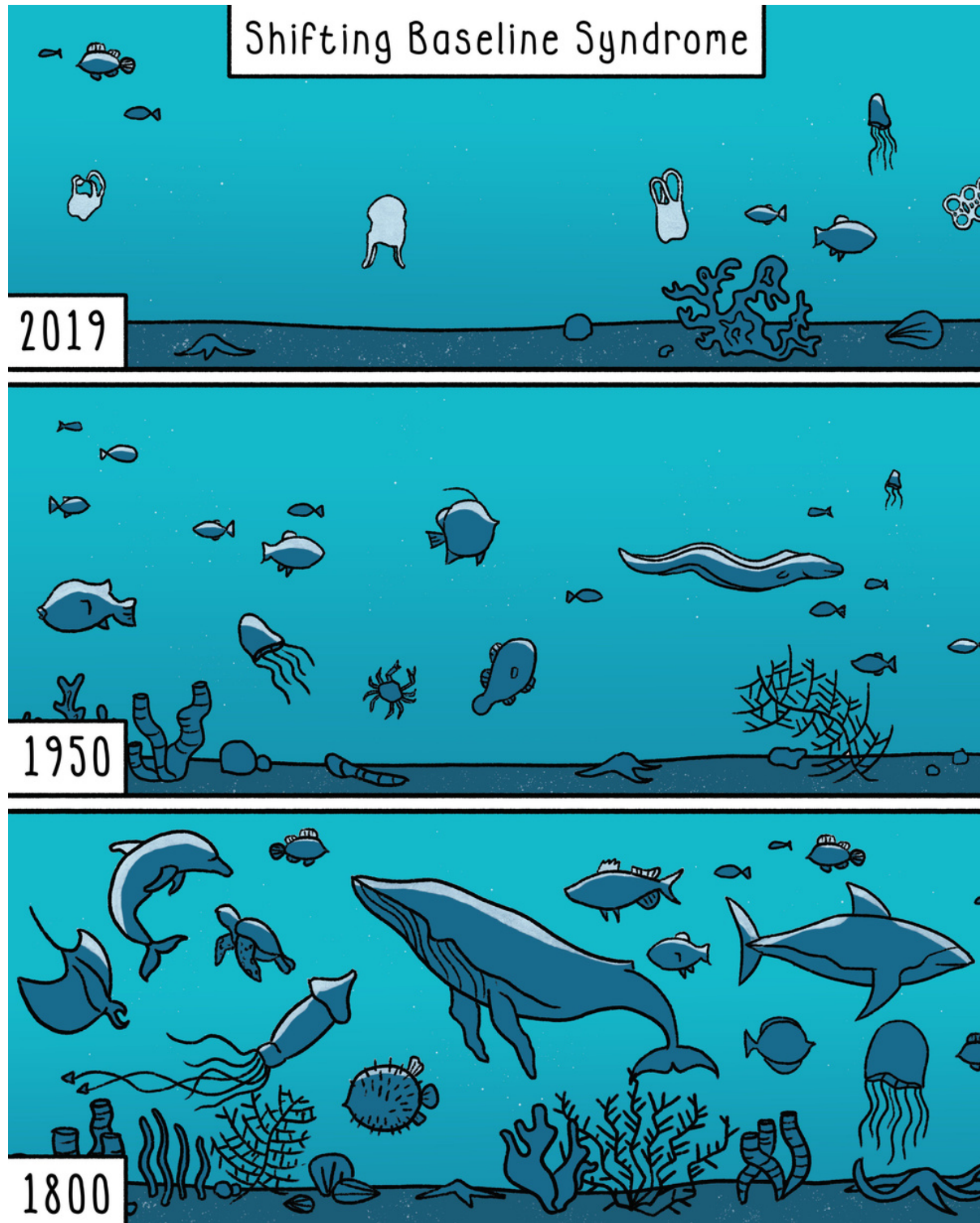
3 visuals to
remember

Biodiversity Stripes



[Link](http://stats.livingplanetindex.org/)

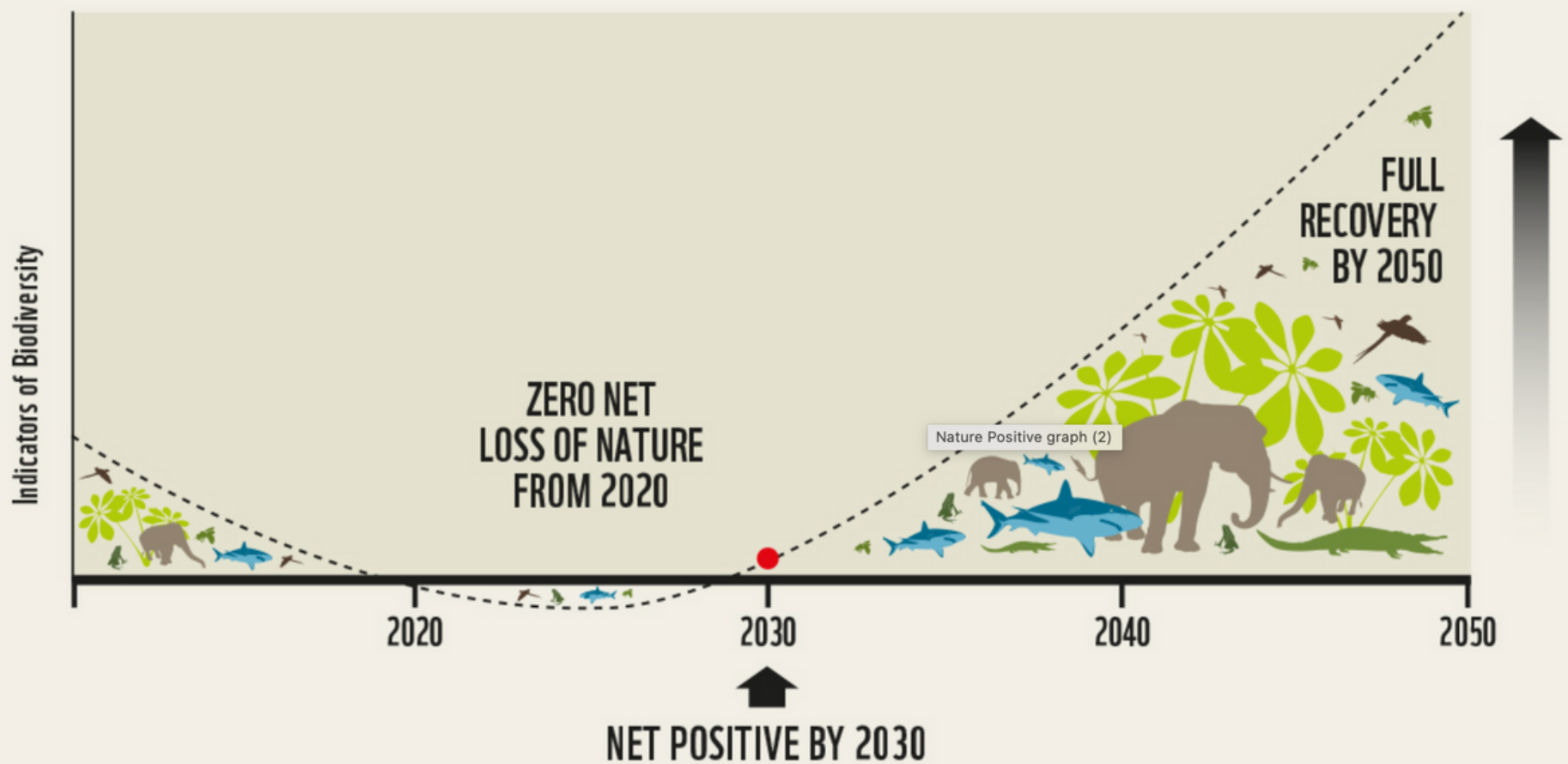
Shifting Baseline Syndrome



[Link](#)

Nature Positive


Global Goal for Nature: Nature Positive by 2030



[Link](#)



ACTION



*“What you do makes a
difference, and you
have to decide what
kind of difference you
want to make.”*

-Jane Goodall

1. Change what you eat

Switch to vegetarian/vegan diet
& buy organic produce.

Food production has caused
70% of biodiversity loss on land
and 50% in fresh water.

[Link](#)

2. Demand change

Pressure on politics to by
voting, petitions, strikes,
keeping them accountable & co.

[Link](#)

3. Legal Rights

Support legal rights for nature

[Link](#)



4. Donate

Donate money or time to nature causes (Environmental nonprofits receive less than 2% of charitable dollars)

[Link](#)

5. Career

Dedicate your career to this battle. We need the brightest and most passionate people to tackle this crisis.

Sam's job portal is a great starting point if you look for a job.

The Biodiversity Hero OS is a great place if you want to start your own thing.

6. Raise awareness

Spread awareness & help to inform others about the importance.

Download this PDF for example & send it to your colleagues.

7. Reduce

Reduce your consumption.

The less we need the less we use natural resources.

[Link](#)

8. Time outdoors

Spend more time outdoors to learn about your local ecosystem.

By using the apps as discussed before.

9. Rewild

Rewild your balcony, streets,
garden, land etc.

Chris has some great resources
on where to start.


[Link](#)

10. Support 30X30

To safeguard biodiversity and reduce the negative impact we created the global goal to protect 30% of land & sea until 2030.

E.O. Wilson & I would like to take it even to 50%

[Link](#)



Now, don't be
overwhelmed.

Yes, there is a lot of sh#t going
on, but good news is that we
can still turn this around.

So share these insights with
your friends, family members,
colleagues & co.

Let's be brave and take bold
actions for a wilder planet.



Your turn.



Still here?

My name is Oliver, Founder of Wildya & Wild Business Mates.

I attempt to transform eco-anxiety into action.

If you enjoyed this you can follow me here