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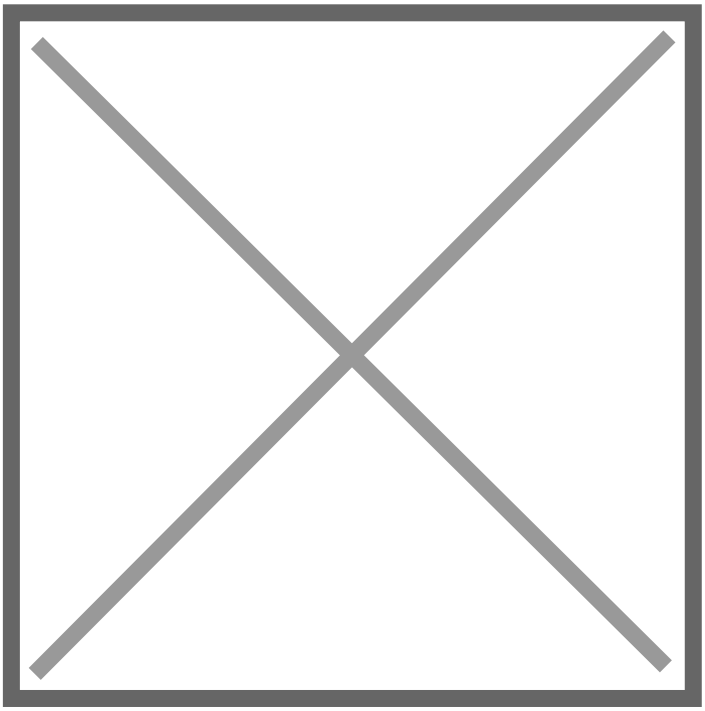
Turning tide for wildlife: Gavin Bruce on science, stewardship and sustainable conservation

14 October 2025 | News

In an exclusive AgroSpectrum interview, Gavin Bruce, Chief Executive of International Animal Rescue, (www.internationalanimalrescue.orgÂ) reflects on over two decades of conservation, highlighting the shift from top-down approaches to community-led strategies that empower local people while benefiting biodiversity and climate. On coral reefs, he stresses the need for proactive resilience building, combining restoration, local stewardship, and global climate action to safeguard ecosystems.



In an exclusive *AgroSpectrum interview, Gavin Bruce, Chief Executive of International Animal Rescue*, (www.internationalanimalrescue.orgÂ) reflects on over two decades of conservation, highlighting the shift from top-down approaches to community-led strategies that empower local people while benefiting biodiversity and climate. On coral reefs, he stresses the need for proactive resilience building, combining restoration, local stewardship, and global climate action to safeguard ecosystems.

Gavin emphasizes that habitat protection, rather than just flagship species, ensures long-term wildlife sustainability, with community engagement reducing pressures on natural resources. Successful initiatives, such as mangrove restoration, demonstrate how conservation can boost livelihoods, support female empowerment, and protect ecosystems simultaneously. Looking ahead, Gavin remains cautiously optimistic, calling for immediate action and a nature-positive economy to secure the future of wildlife and coral reefs.

Opening

Gavin, after more than two decades in conservation and animal rescue, what do you see as the single greatest shift in how the world now approaches wildlife protection?

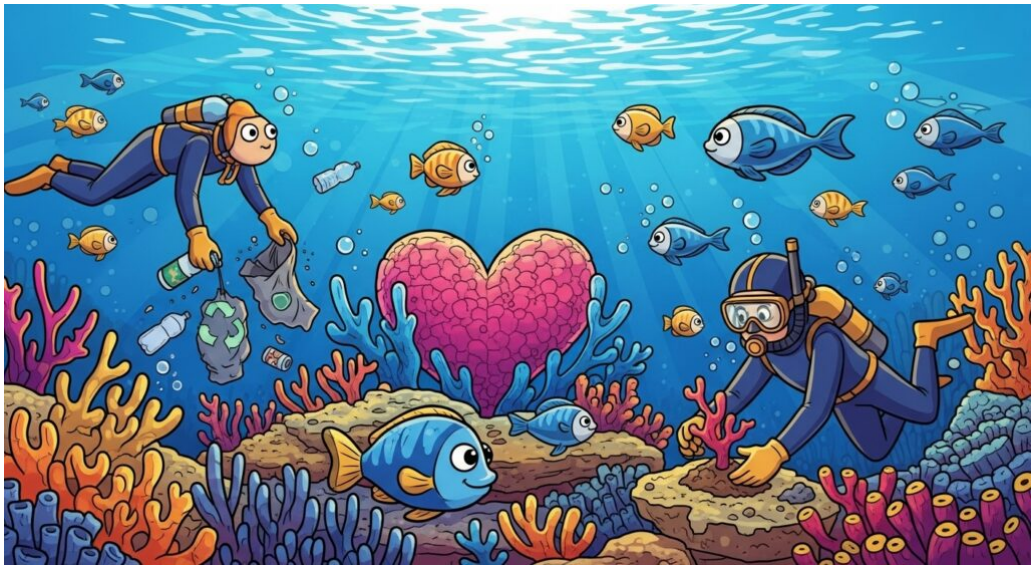
The single greatest shift is the move from top-down conservation to community-led, grassroots strategies.

Rather than imposing protection on local people, the focus is increasingly on empowering communities that live alongside wildlife and nature. By recognising their rights, traditional knowledge, wellbeing, and economic needs as central to sustainable conservation.

This shift reframes wildlife protection as a social, economic, and climate solution, not just an ecological one. By investing in people, we are investing in nature, and delivering positive outcomes for people, biodiversity and climate.

Coral Reef Conservation

Coral reefs support nearly a quarter of all marine species yet face existential threats from bleaching, acidification, and El NiÃ±o. How should conservation priorities adapt to this escalating crisis?



Conservation priorities will need to shift from reactive protection to proactive resilience building. We need to build on what is resilient, restore whatâ??s damaged, and reform how we live with the ocean.

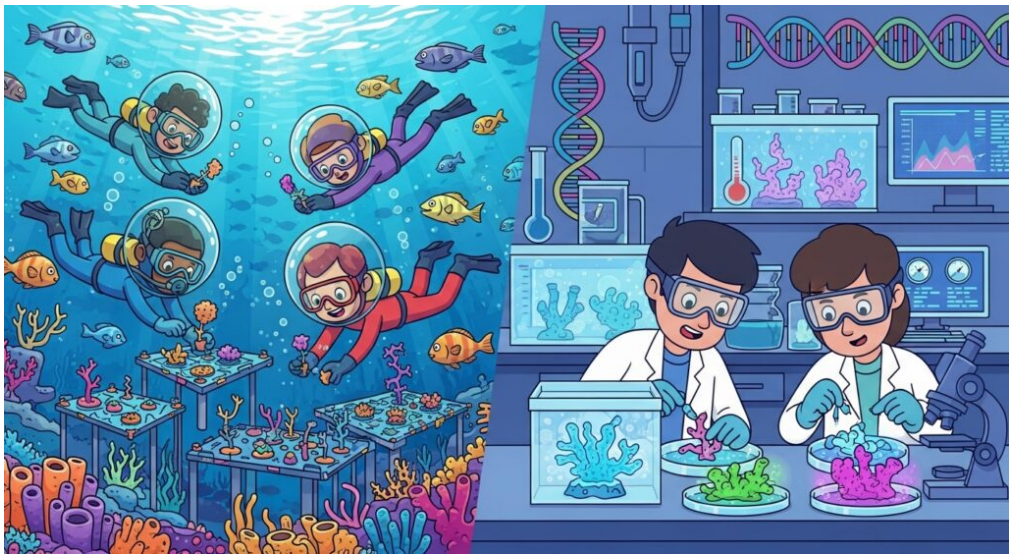
Climate adaptation: protecting and restoring reefs most likely to survive warming and investing in research to evaluate whether it is possible to increase tolerance through assisted evolution and coral propagation, and whether this can be applied at scale.

Integrating local stewardship: empowering coastal communities to manage fisheries, curb pollution, and build sustainable livelihoods that reduce pressure on reefs.

Creating protected and connected refuges: establishing and connecting marine protected areas so reefs can recover and repopulate after stress events.

Addressing root causes: coupling reef conservation with aggressive global climate action to cut emissions.

Technologies like coral gardening and assisted evolution are gaining attention. Are these scalable solutions, or stopgaps until broader climate action takes hold?



If the conditions are favourable, corals have the ability to regenerate quickly. I recall doing some research on the Great Barrier Reef, annually photographing transects on a reef that had been affected by a crown of thorns starfish outbreak. After just ten years, there was significant settlement of a diverse range of corals. The water quality was good (clarity, acidity, temperature, pollutants), and the recovery was remarkable.

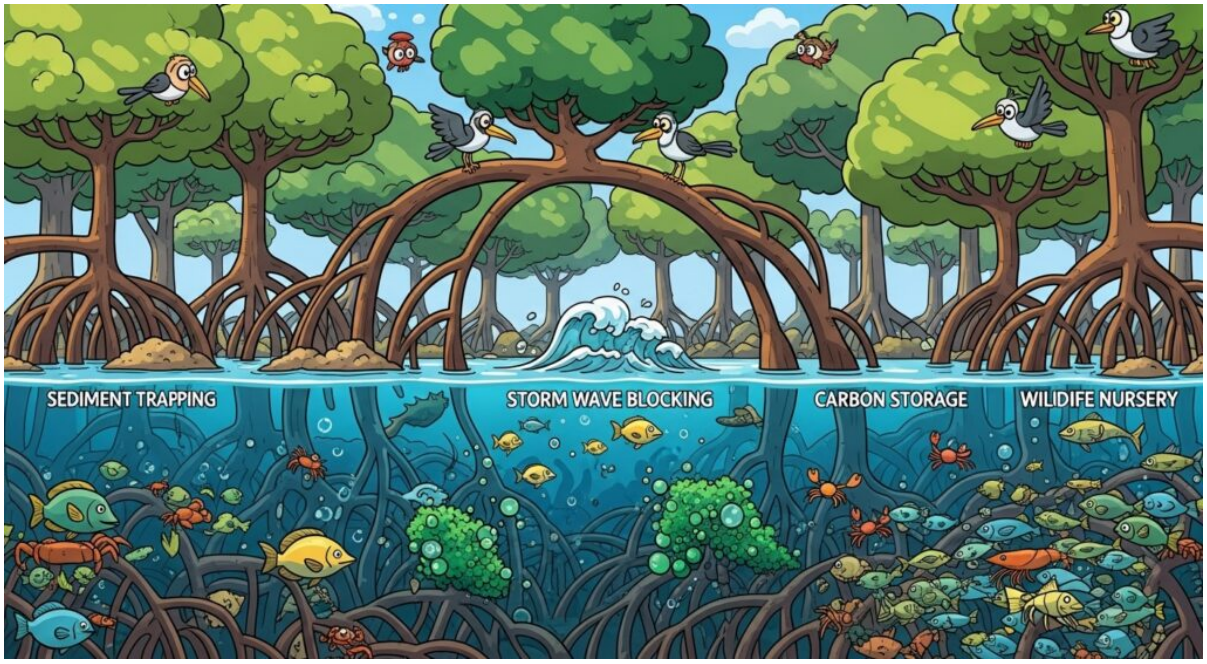
Coral conservation strategies must concentrate on boosting ecosystem resilience by reducing greenhouse gas emissions and other drivers of reef degradation. The approach needs to be proactive, such that suitable conditions for coral growth and settlement are embedded into policy and management.

Reactive measures tend to be small-scale and targeted at repairing degradation that has already occurred. From the research conducted so far, coral restoration can make a small but expensive contribution to the conservation effort.

Coastal communities depend heavily on reefs for fisheries and livelihoods. What models best balance ecosystem protection with economic survival?

Coastal communities are dependent on both the marine environment and coastal areas for farming; all of this is at threat from the effects of climate change and the breakdown of the natural support systems. We have seen a tangible impact from working alongside communities on strategies that deliver positive outcomes for people and nature. The coastal zone often comprises mangroves, seagrass and reefs; each of these ecosystems provides an important function in supporting livelihoods, bolstering biodiversity and mitigating climate. By implementing community-led mangrove restoration initiatives, we have seen the risk of saltwater intrusion into coastal farms reduce, which supports the economy of coastal villages and reduces the

The mangrove ecosystem supports biodiversity and reduces greenhouse gas emissions, mitigating climate change. They provide important nurseries for fish, which can support sustainable fishing and livelihoods.



By engaging communities and giving access to knowledge and education, conservation efforts can be achieved through strong collaboration. Sustainable fishing on coral reefs involves a combination of strategies, such as establishing protected areas, using selective fishing gear, and setting catch limits and size restrictions to protect fish populations and their habitats and limiting fishing during spawning seasons.

Wildlife Conservation Strategies

Conservation efforts often oscillate between protecting flagship species and entire ecosystems. Where should the focus be to deliver the greatest impact?

Itâ??s all about habitats! If you can protect the habitat, then the flora and fauna can thrive. Of course, flagship species are a useful tool in conservation efforts. We work with bears, tigers and orangutans, which are all high-profile icon species that represent the ecosystems in which they reside.

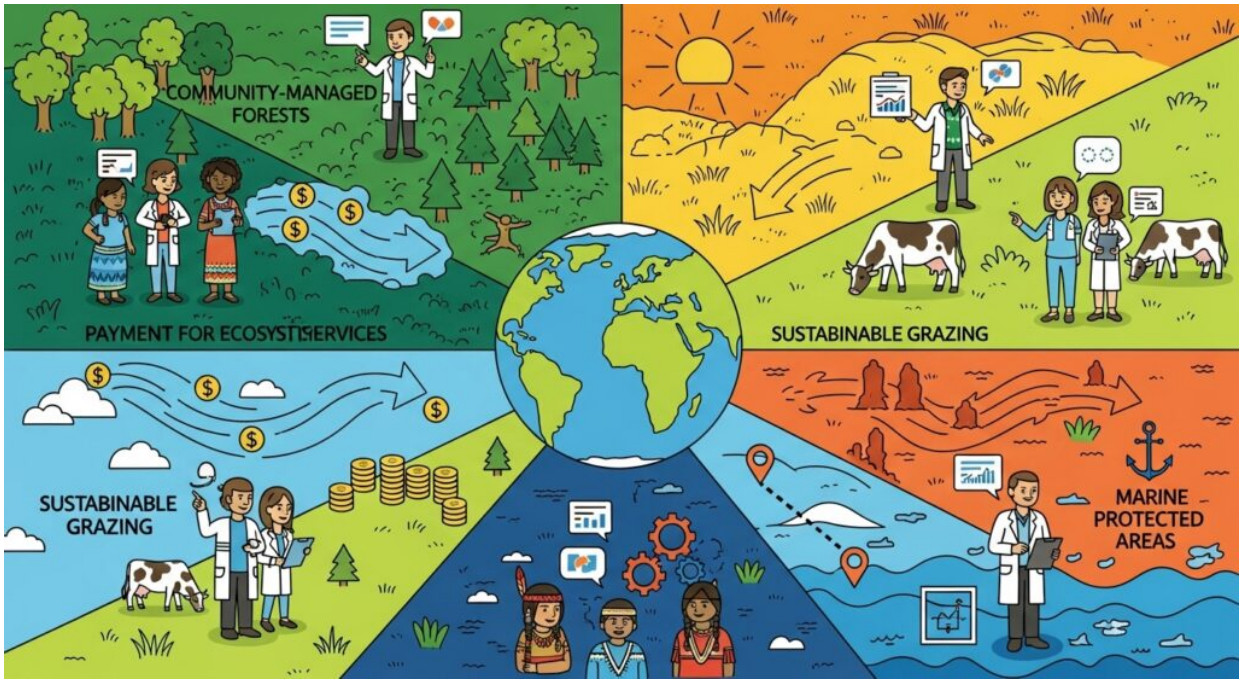
When habitats are degraded, fragmented, encroached upon, destroyed (due to natural or anthropogenic causes), then the sustainability of viable populations is diminished. This then disrupts the balance of the ecosystem, which causes stress, and reduced resilience. This then becomes a spiral of decline, which is hard to reverse.

The most effective conservation strategies empower local communities. The outcome must be increased health, prosperity and wellbeing for the people, which can then reduce the pressure on nature and be a template for resilient ecosystems.

Sustainable Wildlife Management

Are there global modelsâ??whether in forests, grasslands, or marine zonesâ??that stand out as replicable for other regions?

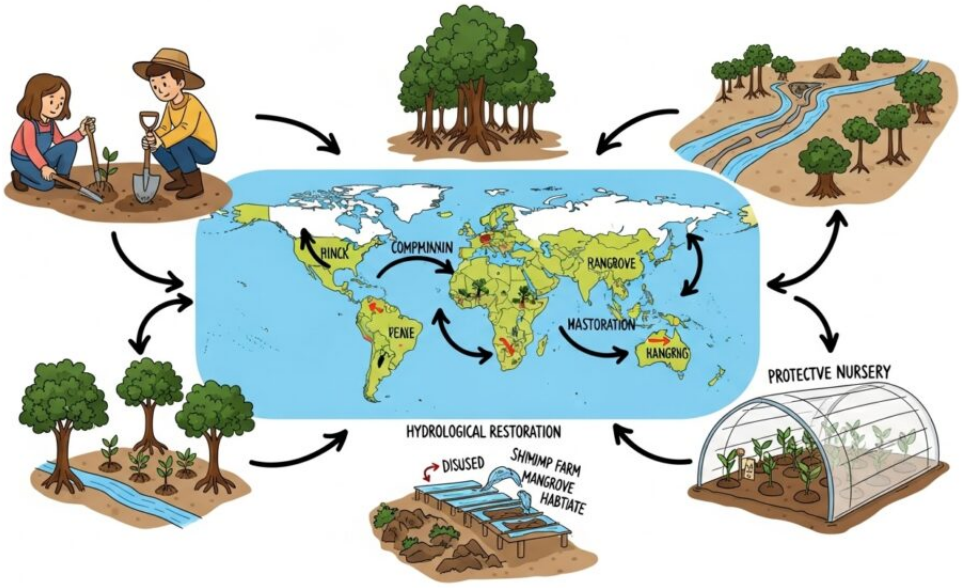
Most pressure on wildlife is as a result of anthropomorphic effects. At the local level, this is often due to a lack of access to healthcare, education, knowledge, skills and finance. This leads to activities that put pressure on wildlife and habitats: logging, hunting, poaching, fires, wildlife trade and encroachment. By engaging communities in initiatives that improve prosperity and wellbeing, the drivers for more exploitative activities are reduced. This has a positive impact for both people and nature.



It is crucial that this is not a top-down model. While there may be similarities, each situation is different; therefore, to create sustainable change, these programs must be community led and tailored to the specific need.

These grass-roots initiatives can then be scaled across different landscapes to create lasting change.

A great case study is our community mangrove restoration program. In low lying coastal farming communities, as a result of climate change - rising sea level and increase frequency of storm surges - that is an increased risk of sea water flooding the farms. Salt water intrusion has a devastating effect on the crops and forces the community into poverty. Historically, the protective mangrove buffer has been removed, which exposes farming villages to a higher risk. If crops fail, people are forced to engage in other, often exploitative, activities to generate income; this creates a threat to ecosystem.



By working with these communities to restore the mangrove buffer, there is a tangible positive impact. Mangroves will boost biodiversity, mitigate saltwater intrusion, absorb carbon and bolster livelihoods. In parallel, other activities to support communities are made available, access to education and literacy, healthcare, training to use organic farming techniques to increase yields and income generation. The mangrove restoration work is often taken on by the women in the community, which generates not only additional income but also female empowerment.

These are not large-scale NGO activities; instead, this is a local support structure that empowers communities to help themselves and learn from one another, building resilience and creating lasting change.

Closing Reflection

Looking ahead 25 years, what gives you optimism that coral reefs and wildlife can survive the climate and biodiversity crisesâ??and what must the world do differently, starting now?

Economies have long been built on fossil fuels and consumerism, based on the logic that 'more is good' and that wealth is just about money; however, this is changing. As we can see from the global geopolitical picture, we are not all on the same page but, it is happening. Technology is moving fast, and citizens are more engaged. There is a growing expectation that governments and corporations take action, and individuals are starting to take responsibility by thinking more about their own footprint.

It is not too late, but the time is now to protect the ecosystems that we have left, build resilience, and move quickly to a more sustainable, nature-positive economy.

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