

From Sustainable Hospitality to Regenerative Coastal Tourism

How Biodiversity Can
Reshape Tourism in Thailand

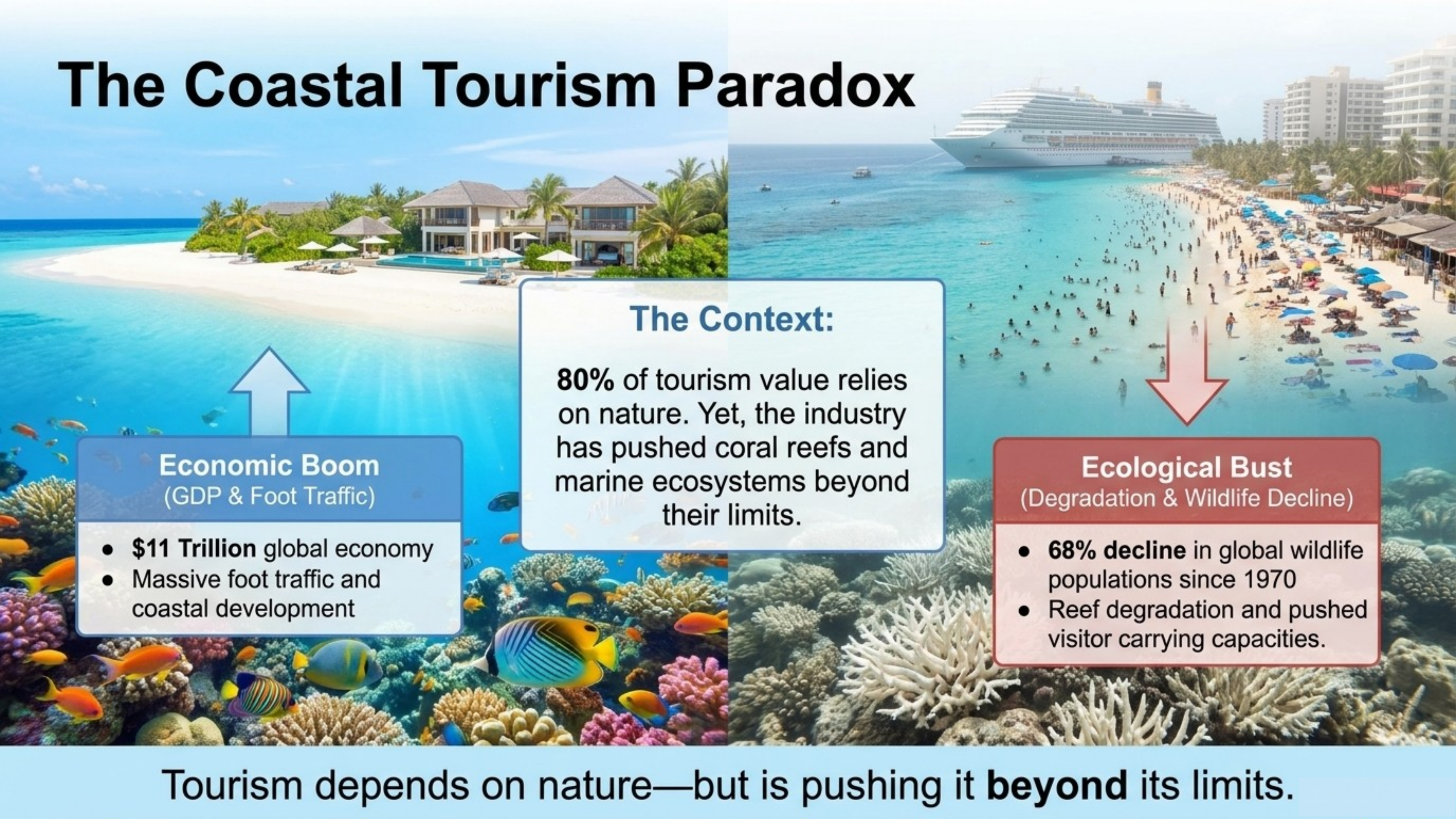
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The Coastal Tourism Paradox



The Context:

80% of tourism value relies on nature. Yet, the industry has pushed coral reefs and marine ecosystems beyond their limits.

Economic Boom (GDP & Foot Traffic)

- **\$11 Trillion** global economy
- Massive foot traffic and coastal development

Ecological Bust (Degradation & Wildlife Decline)

- **68% decline** in global wildlife populations since 1970
- Reef degradation and pushed visitor carrying capacities.

Tourism depends on nature—but is pushing it **beyond** its limits.

A Necessary Shift



Consuming natural capital.

Viewing the reef as a consumable attraction.

Reducing the footprint.

The mitigation hierarchy: Avoid and Reduce. The goal is simply "less harm"

Actively restoring local ecosystems.

Rebuilding natural capital and biodiversity.

Creating an overall net benefit.

The 30x30 Goal: Tourism acts as the "Guardian of Nature".

The future is not about doing less harm—it is about **creating more life.**



Guest experience is growing more coastal tourism., business, reefs, itles and camring for model of coastal tourism.



Brand value preventes:relope brand value to brand the name the business models.



Biodiversity ergaged inot organized cam meets, spente long-term businesss, uaing long-term experience.

Risk Framing Box
Enhancing risk ramies and resk frannbility to int ottoversions results a mcetributing of coastal tourism.

Biodiversity is not a backdrop—it is the business model of coastal tourism.

Flagship Species as a Strategic Lever



Flagship Species as a Strategic Lever, and public effect.

Case Study 1: Maya Bay



Before (The Crisis)



Mass tourism phenomenon led to severe reef damage, overcrowding, and ecological collapse.

Intervention (2018 Total Closure)



Full bay closure, strict spatial zoning, and "no boat access" to the front bay.

After (Ecological Result)



Rapid coral recovery and the critical recolonization of Blacktip reef sharks in the shallow nursery.

Hospitality Insight: Limiting access increases long-term premium destination value.

Case Study 2: Koh Tao



Thai Whale Sharks

Decoding whale sharks one spot at a time



JOURNAL OF FISH BIOLOGY 

REGULAR PAPER

Citizen science reveals the population structure and seasonal presence of whale sharks in the Gulf of Thailand

[Kirsty Magson](#) ✉ [Emily Monacella](#), [Chad Scott](#), [Noémie Buffat](#), [Sirachai Arunrugstichai](#), [Metavee Chuangcharoendee](#), [Simon J. Pierce](#), [Jason Holmberg](#), [Gonzalo Araujo](#)

METRIC 1

249

Total Sightings
Logged

METRIC 2

178

Unique
Individuals
Identified

METRIC 3

84% ↑

Surge in
Reporting
(2015-2019)

The Mechanism: Leveraging the whale shark as a global draw to turn recreational divers into citizen scientists via photo-ID reporting, supporting population and monsoon-cycle tracking.

Hospitality Insight: Guests want to be part of the solution—transform them from passive consumers into active stewards.

Case Study 3: Rewilding Phuket



The StAR Project Context:

A multi-stakeholder blueprint (WildAid, ReShark, DMCR, DNP) to re-establish Leopard Sharks in Thailand's Andaman Sea.

Wild Ecosystem Integration

Restoring a functionally extinct apex predator to balance the reef food web.

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Cycle of Regeneration



Captive Breeding

Aquaria Phuket & PMBC.

Soft Release

Acclimation periods in sea pens (e.g., Maiton Resort).

Acoustic Tagging

Attaching tags to monitor movements and post-release survival.

Hospitality Insight: Active ecosystem restoration creates entirely new, premium wildlife experiences.

Private-Sector Stewardship: The Merlin Bay LMMA & Marriott Merlin Beach Initiatives

Case Study 4: Merlin Bay



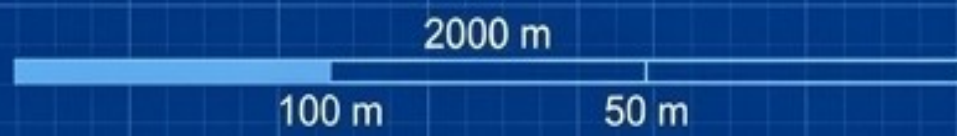
Merlin House Reef Conservation: Collaboration with WildAid & Sea Bees Diving to restore and protect the reef. Includes science-based monitoring, mooring buoys, and guest education.

Marine Life Protection & "Journey to the Sea" Turtle Release: Regular reef monitoring and collaboration with Phuket Marine Biological Center & Royal Thai Navy for sea turtle conservation.

Merlin Butterfly Sanctuary: Partnership with Love Wildlife Foundation to increase native butterfly population. Guests can participate in interactive educational tours.

The Framework: A Locally Managed Marine Area (LMMA) supported by private sector commitment and government recognition.

Sustainability Practices: Marriott's "Serve 360" initiative focuses on reducing single-use plastics and promoting sustainable operations. Part of "Good Travel with Marriott Bonvoy" program.



From Hotels to Regenerative Systems

1. Protect (Maya Bay)

Design operations within strict ecological carrying capacities.

2. Understand (Koh Tao)

Engage guests meaningfully in citizen science.

3. Restore (Phuket)

Invest in natural capital and species rewilding.

4. Steward (Merlin Bay)

Build conservation directly into the hospitality financing model.

The future of coastal tourism is not about building next to nature—but about rebuilding nature through tourism.

A Framework for Transformation

