

The State of the Tropics Matters Wherever You Live

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June 29 is the day the world gets a definitive answer to the question, “Are things getting better in the tropics?” The question might not seem particularly relevant to those of us living in North America. But the tropics and the temperate zones are closely interrelated. Each region has serious environmental and economic impacts on the other.

The fact is, even if you routinely battle snow at your own home, you have a vested interest in the state of the tropics.

International Day of the Tropics

Launched by Nobel Laureate and Myanmar’s State Counselor Aung San Suu Kyi in 2014, the [State of the Tropics Report](#) is an international collaboration among 12 major tropical research institutions. Updates to the State of the Tropics Report are released on June 29, that date has been recognized by the United Nations as the [International Day of the Tropics](#) since 2016.

The event focuses on environmental, social, and economic indicators of progress in the tropics. United Nations days of observance promote international awareness and action on issues that are important to the member states. And whether people realize it or not, the tropics are important to everyone.

The Tropics

“The tropics” refers to the zone between the Tropic of Cancer and the Tropic of Capricorn, the two lines of latitude flanking the equator. Their year-round warm temperatures and high annual rainfall, giving rise to tremendous biodiversity.

The tropics house nearly 80% of the world’s species, despite covering only 40% of the Earth’s surface area. The tropics will comprise [50% of the global population](#) by midcentury. People in the tropics lag behind the rest of the world on [key indicators](#) of well-being such as life expectancy and economic output per capita. They are more likely to live in slums, suffer malnutrition, and experience water insecurity than residents of temperate zones.

The tropical world’s economy is growing 20% faster than the rest of the world. This circumstance frequently pits immediate human welfare against long-term environmental health.

Climate Change

The [consequences of climate change](#) are no less pronounced in tropical regions than temperate ones. The [dry zones](#) that form the edges of the tropics are already growing,

expanding deserts and shrinking rainforests, with catastrophic results.

[Responsibility](#) for these changes lies predominantly in the United States and China. Despite rapidly growing economies, tropical regions [contribute much less carbon dioxide](#) (total and per capita) to the atmosphere than Northern countries.

Habitat and Biodiversity Loss

Changing climate amplifies the more direct human impacts on habitat and biodiversity.

Nearly one-third of all tropical land is degraded due to human activity, threatening endemic species, and [contributing](#) further to climate change. For example, 99% of mangrove species are found in the tropics, but the area covered by these important [carbon sinks](#) has decreased since 1980. In the original State of the Tropics [report](#), 26% of mammals, 43% of amphibians, 12% of birds, 27% of reptiles, and 67% of plant species found in the tropics were classified as threatened.

Human habitat is at risk in the tropics as well. In 50 years, many now-tropical regions will be [uninhabitable](#), generating more than 140 million [climate refugees](#) by midcentury. [Island nations](#) are also threatened with the loss of habitable land as sea levels rise.

Deforestation

[Deforestation](#) is among the most significant mechanisms for biodiversity loss in the tropics. It is also [associated with](#) soil erosion, decreased water quality, and even loss of educational opportunities.

Tropical rainforests have [decreased](#) from covering 14% of Earth's land to only 6%. By some estimates, they could be lost entirely within a century. Changing land use through urbanization and infrastructure development are significant parts of the problem. But logging and unsustainable agriculture are the primary causes of deforestation. These practices are often driven by demand for [beef](#), [palm oil](#), [soy](#), and exotic wood products in distant countries such as the U.S.

Ocean Impacts

Warming [ocean temperatures](#) caused by global climate change can influence El Niño patterns and shift weather and rainfall patterns across the globe. Warmer waters are also a threat to [coral reefs](#) through [bleaching](#), disease, and predators. Reefs protect coastal communities from beach erosion and storm effects and provide economic benefits through fishing and [tourism](#). Unfortunately, these activities can further harm the reefs. Without protection, [70 to 90%](#) of tropical coral reefs could be lost by 2100.

[Pollution](#) from oil and [plastics](#) is another threat to coral reefs and one that affects myriad other species as well. Tropical countries already stand to [lose the most fish](#) species due to climate change, with few if any stocks replacing them. This problem is [exacerbated](#) by foreign demand for depleted and even [endangered](#) stocks.

The Global Tropics

The causes and effects of environmental degradation are not geographically isolated.

What we do in North America has significant impacts on the people and species living in the tropics. And those impacts, in turn, make themselves felt here, too.

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