Natural World Heritage sites under growing threat, but bright spots remain

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Threats from the natural world

The report identifies several key challenges affecting heritage sites. The most widespread conservation challenge the report identifies is climate change.

Climate-related changes in biological conditions such as ocean acidity, salt concentrations, sediment buildup, droughts, flooding and groundwater flow, and variable temperatures are considered “high” or “very high” threats to 117 of the 271 heritage sites evaluated – 43% of them.

One-third of the 50 World Heritage sites that contain glaciers will see those glaciers disappear by 2050, the report projects.

Around the world, coral reefs have been, and are still, bleaching – turning white as the colorful organisms that build and inhabit them die off – affecting 30% of the 29 World Heritage-listed coral reef ecosystems.

In addition, invasive species are encroaching on World Heritage sites. For example, in Ecuador’s Galápagos Islands, invasive species like rats and feral cats are considered one of the main causes of extinctions, including to the islands’ famous birds. In Australia’s Gondwana Rainforest, the last vestiges of an ancient plant and animal “living museum” are retreating due to invading non-native species.

Tourists view the face of the Perito Moreno Glacier in Los Glaciares National Park, Argentina.

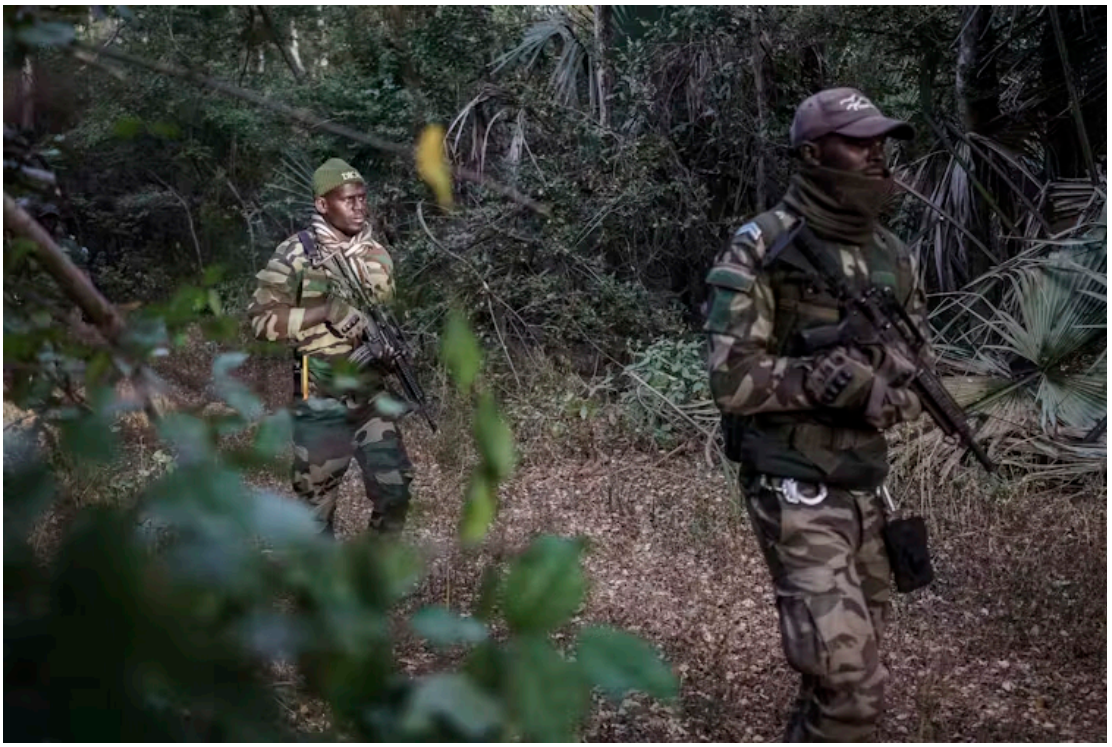
Romina Cruz/picture alliance via Getty Images

Threats from people

Additional human pressures are also endangering these unique areas. Threats to these sites from the outside include logging and mining in the region, developing nearby land, diverting natural water flows, and polluting the air, water and land. Roughly two-thirds of the sites studied face at least some danger from human activities happening outside the sites' formal boundaries.

In addition, the report says heritage sites need more financial support to be better able to respond to key threats. It finds that most lack consistent, long-term funding for staff salaries, ecosystem monitoring, and continued maintenance of protection programs. Chronic underfunding is the primary barrier to effective ecosystem management. Funding typically comes from organizations such as the World Heritage Fund or the Global Environment Facility, an organization made up of 186 member countries, institutions, nongovernmental organizations, and the private sector that funds environmental projects worldwide.

The IUCN report warns that even effective initiatives may struggle in the long term without stronger regional, national and global support. That could include efforts like the Okavango's Community Management of Protected Areas Conservation program, which connects rural communities and conservationists to support both people and nature.



Members of the Lion Intervention Brigade conduct an anti-poaching patrol at Niokolo-Koba National Park, Senegal.

AP Photo/Annika Hammerschlag

What is missing from the 2025 report?

There is good news, though. Targeted local action, such as anti-poaching efforts and local community involvement, have improved conditions at four sites in West and Central Africa, shifting their status from "critical" to "significant concern."

There is more to know about these sites and how they are faring. As a community-based conservation scholar, I recognize that while the major drivers of ecological decline can be gleaned from published research, specific causes of that decline are best learned on the ground.

The outlook provides critical environmental trends, but it could be strengthened by including specifics based on quantitative, community-based monitoring, such as wildlife population surveys by local experts. For instance, at a conference I attended in 2024, a frog biologist from Botswana observed that, before her work, the previous frog study in that part of the delta was in 1980.

While critical local and Indigenous knowledge is recognized in the report, it is largely excluded from assessments, both because weaving it with conventional scientific analysis is difficult or because communities may choose to protect certain knowledge.

The Okavango Delta is one of many World Heritage sites, living landscapes rich with local cultural value and global significance. Like many remote heritage sites outside Europe and North America, there is a lot that remains unknown about the biodiversity in the Okavango.

The report acknowledges that recognizing the relationship between people and the environment would also improve future assessments. Overall, it offers a clear picture of global conservation trends while also acknowledging local realities and successes: for the heritage sites across the planet, conservation succeeds when people and nature thrive together.

Jessica Beaudette received dissertation funding from the American Association of University Women and Arizona State University for field research in Botswana.