La Moskitia: patrols, restoration, and cacao to protect Mesoamerica's most threatened forest

With the support of the project *Five Great Forests of Mesoamerica: a regional initiative for climate, biodiversity, and people*, funded by the European Union, Honduras has strengthened conservation actions in la Moskitia, the second-largest humid tropical forest in Mesoamerica.

Through joint efforts between Indigenous peoples, government institutions, and organizations, forest and cacao nurseries, community patrol groups, and territorial control mechanisms have been established, enabling the restoration of more than one thousand hectares, improving livelihoods, and slowing deforestation in one of the region's most threatened landscapes.



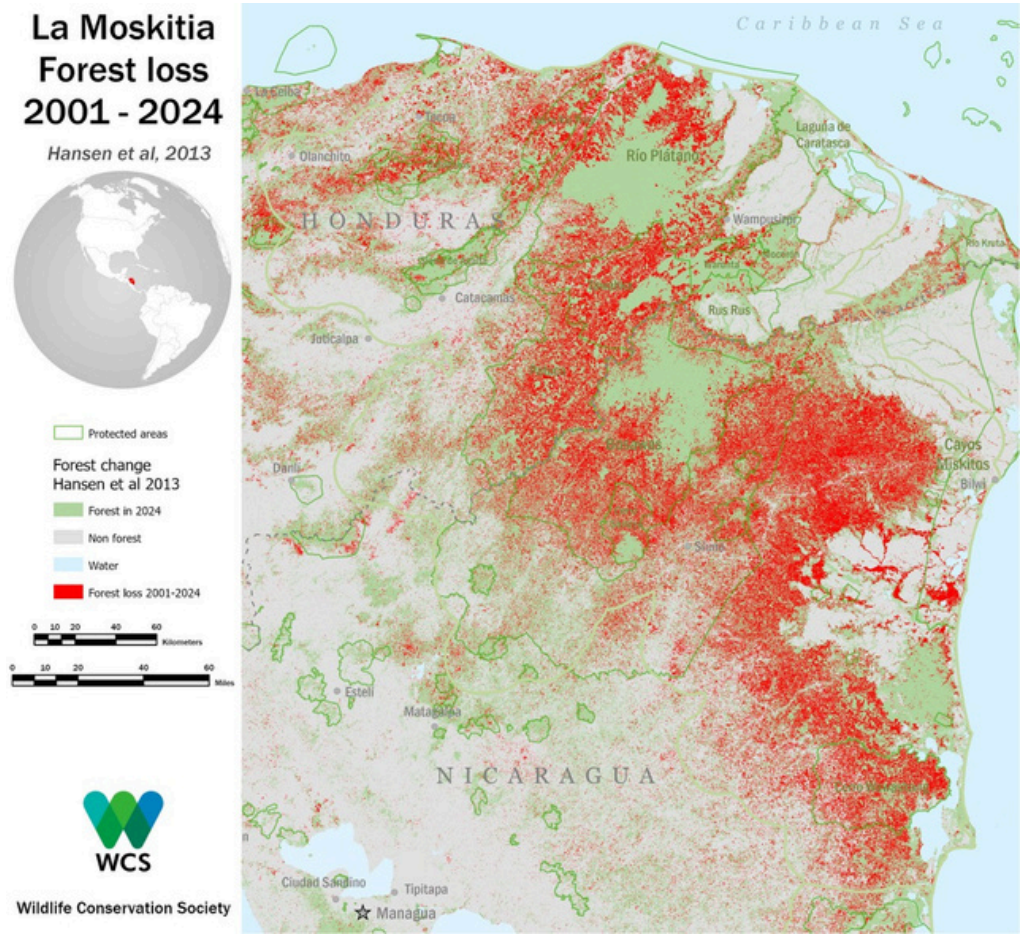
Watch the video!

A forest that is no longer the same

La Moskitia, a territory shared between Honduras and Nicaragua, covers approximately 2.1 million hectares of forest. This landscape is shaped by large river systems, including the Patuca River, over 500 kilometers long, and the Coco–Segovia (Wanki) River, more than 800 kilometers long, which forms part of the border between the two countries.

According to the Human Footprint analysis coordinated by the Wildlife Conservation Society (WCS), Honduran Moskitia is the wilderness landscape that has experienced the greatest increase in human influence in Mesoamerica over the past two decades. Between 2000 and 2020, the extent of its wilderness area was reduced by 59%, shrinking from 52,000 km² to 21,000 km², along with a reduction from four to two large forest fragments.

This change represents not only forest cover loss, but also a sustained increase in human pressure on the territory, mainly associated with the expansion of the agricultural frontier—particularly illegal cattle ranching, one of the main threats to ecological integrity and landscape connectivity.



Illegal cattle ranching is the main threat affecting La Moskitia. Map by WCS Mesoamerica.

Despite these pressures, la Moskitia harbors biodiversity of high ecological value, including emblematic and threatened species such as the Baird's tapir *(Tapirus bairdii),* the giant anteater *(Myrmecophaga tridactyla),* and the jaguar *(Panthera onca),* all key indicators of ecosystem health. It is also home to culturally significant species such as the great green macaw and the scarlet macaw—the latter considered the national bird of Honduras—along with a rich diversity of native flora and valuable timber species.

In this context, Indigenous organizations such as DIUNAT and BAKINASTA, in coordination with WCS, the Forest Conservation Institute (ICF), and community technicians, are promoting integrated strategies that combine conservation, sustainable production, and Indigenous territorial governance.



Ocelot, tapir, and great green macaw—emblematic species of regional biodiversity.

35	6	10,000	20	2	12,000	1,000
PEOPLE TRAINED IN MONITORING	COMMUNITY PATROL GROUPS	KILOMETERS COVERED	CACAO FARMS	CENTRAL NURSERIES	PLANTS PROPAGATED	HECTARES RESTORED

Key results in La Moskitia under the Five Great Forests of Mesoamerica

Nursery establishment and cacao production

The establishment of agroforestry cacao farms has become a key strategy to stimulate the local economy, generate income, and strengthen among producer families a sense of territorial protection and long-term vision. Currently, the process involves organized producers across 20 agroforestry farms, where cacao represents a productive alternative compatible with forest conservation and a direct incentive to maintain tree cover.

"The price of cacao is high, and that's why people are paying more attention to it," says cacao producer Iris Tesalia Flores Cruz.



Cacao producers from the community of Pimienta. Left: Iris Tesalia Flores Cruz. Right: Grenny Sulema Prado Cruz. Photos by Claudia Novelo Alpuche / WCS Mesoamerica.

Beyond income generation, these farms create local employment linked to restoration activities, plant management and care, and plot maintenance, contributing to improved soil health, reduced degradation, and strengthened landscape connectivity.

This vision is reflected in daily plot management.

"With the interest in cacao, you take advantage of caring for the land, and now I leave other trees to provide shade," shares local producer Ruiz Celaya Cuevas.

Early establishment efforts faced challenges related to lack of irrigation, high temperatures, and prolonged droughts, resulting in significant losses. In response, the project supported the installation of two central nurseries in Wampusirpi and Brus Laguna, with permanent access to water and seeds sourced from local producers.

During the severe drought recorded in 2024, approximately 12,000 cacao plants were kept alive out of nearly 15,000 produced, ensuring plant material for subsequent project phases.



Nursery management and plant transport. Photos by Marlon Foster and Luis Paguada / WCS Honduras.

With the return of rains, a grafting workshop using local buds was conducted, training 15 community technicians—10 of whom achieved success rates above 80%. These technicians now propagate clones recommended by the Honduran Foundation for Agricultural Research (FHIA), strengthening local autonomy and reducing dependence on external services.

As part of the territorial approach, passive restoration actions were implemented across approximately 1,000 hectares, complemented by nursery plant production destined for agroforestry plots, incorporating species such as nance, lemon, mahogany, and gualiqueme.



Oscar Salinas and Francisco Mence Mendoza, cacao producers. Photos by Claudia Novelo Alpuche / WCS Mesoamerica.

Knowing the forest to protect it

For years, much of what happened in la Moskitia's forest went unnoticed. Today, that reality is beginning to change thanks to strengthened community participation through patrol groups and biological monitoring teams that systematically traverse and observe the territory.

"Before, we didn't know what was happening in the forest," recall members of these teams.

Men and women from the communities of Bilalmuk, Kurhpa, Tukrun, Pimienta, and Wampusirpi —belonging to the Indigenous Territorial Council of BAKINASTA—as well as from Brus Laguna, territory of DIUNAT, carry out regular patrols as part of their own care and control mechanisms, focused on addressing threats and protecting their community spaces. As Chester Waldo Donaire explains:

"The problems we face here are mainly related to land."

Meanwhile, the Interinstitutional Control Center in Krausirpe—an infrastructure installed with support from the European Union—serves as the operational base for the Interinstitutional Task Force Against Environmental Crime (FTIA), administered by the Forest Conservation Institute (ICF), facilitating logistical support for operations in the Río Plátano Man and the Biosphere Reserve.



Members of monitoring groups and forest rangers in La Moskitia. Photos by Claudia Novelo Alpuche / WCS Mesoamerica.

Complementarily, community biological monitoring groups install and review camera traps, identify wildlife tracks, protect nests, and record threats using the SMART (Spatial Monitoring and Reporting Tool). Over time, these forest guardians have covered more than 10,000 kilometers, strengthening local knowledge and documentation of flora and fauna species of ecological importance.

“Some animals are becoming scarce, and we don’t realize which species even exist,” says José Evelio Salinas Herrera, a member of the Wampusirpi monitoring group.

These actions not only strengthen forest control, but also rebuild the relationship between communities and their environment, promoting more informed and collective territorial management.

Productive priorities for the future of La Moskitia

Within the framework of the project, and with support from the Bioversity–CIAT Alliance, studies were conducted to analyze and prioritize productive alternatives in La Moskitia, with an emphasis on cocoa, staple grains, and other options compatible with forest conservation.

The analyses included an assessment of bean and rice value chains in Wampusirpi, revealing traditionally managed production systems with low mechanization and family plots smaller than one hectare, with production primarily intended for subsistence.



From left to right: José Águila Fite, Marlon Foster, Chester Waldo Donaire, Norberto Allen González, and José Evelio Salinas Herrera, members of the BAKINASTA Territorial Council of Wampusirpi.

WCS, in coordination with its partners and with the support of the European Union, continues to strengthen territorial management and local capacities, ensuring that these actions generate lasting impacts for both biodiversity and the communities that depend on the forest.

"Our objective, our goal, is that one day La Moskitia will develop as it should."

-Norberto Allen González-

Text by Claudia Novelo Alpuche / WCS Mesoamerica with support from WCS Honduras. This publication has been co-financed by the European Union. Its contents are the sole responsibility of the authors and do not necessarily reflect the views of the European Union.