

Conservation news

Wildlife under siege in the Mexican Maya Forest

The Calakmul Biosphere Reserve in the Mexican Maya Forest is a well-conserved tropical forest that contains large populations of the threatened Baird's tapir *Tapirus bairdii* and white-lipped peccary *Tayassu pecari*. The area is a semi-dry forest in which animals depend on ephemeral ponds to survive the dry season, but the availability of water in these ponds is declining as a result of climate change. We have documented that, to survive, groups of white-lipped peccary and some individual tapirs travel up to 15 km per day to reach ponds during the dry season (Reyna-Hurtado et al., 2019, *THERYA*, 10, 353–358). In 2023, government projects such as a passenger train (the Maya Train) and a hotel were initiated within the Reserve. The single road through the Reserve is now being used by trucks carrying construction materials for these projects, causing disruption to forest alongside the road from dust, noise and increased traffic density. In addition, the 2024 dry season has been intense, and persisted at the time of writing in June 2024. We have observed that only 25% of the ponds we are aware of have water this year.

These conditions are a challenge for the survival of threatened, shy and sensitive species that depend on obtaining water daily. Despite the disruption from construction traffic, we have documented tapirs visiting a pond only 15 m from the road, and a large group of white-lipped peccaries roaming close to a pond that has water despite visits of people and some trucks to the pond. The first 5 months of 2024 taught us some important lessons in the Mexican Maya Forest: unregulated projects without proper planning, in combination with intense dry seasons, are a threat to the survival of threatened species of large mammals and could alter the behaviour and natural movement patterns of these species.

Access for wildlife to water in the Mexican Maya Forest needs to be secured. Any future projects must consider full protection of the ephemeral and fragile ponds, and traffic



An Endangered Baird's tapir *Tapirus bairdii* in an ephemeral pond beside the road in the Calakmul Biosphere Reserve. Photo: Gustavo Costa.

along the single road should be reduced and regulated. The hotel and the Maya Train need to be managed responsibly. The Calakmul Biosphere Reserve contains the Calakmul Maya archaeological site, a designated UNESCO World Heritage Site. Without proper management, its invaluable cultural and natural treasures, such as tapirs and white-lipped peccaries moving through ancient Mayan temples looking for water and food on the forest floor, will be lost.

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