

Biological corridors



Motozintla, Chiapas | Photography Eccardi Fulvio
Exhibition "Mesoamerican Biological Corridor: Space of Life". 2007

At present, the name "biological corridor, ecological corridor or corridor of conservation" is used to designate a large area through which existing protected areas (national parks, biological reserves), or the remnants of the original ecosystems, maintain their connectivity through productive activities in the landscape that facilitate the flow of species. For example, in the case of two protected areas connected by a region of non-protected forest, sustainable forest management permits the maintenance of the composition and structure of the forest ecosystem while also preserving connectivity, avoiding the establishment of growing areas that can present barriers to some species. The flow of species will be related to the degree of modification of the original ecosystems.

The Central American Commission for Environment and Development defines a biological corridor as "a geographically defined area which provides connectivity between landscapes, ecosystems and habitats, natural or modified, and ensures the maintenance of biodiversity and ecological and evolutionary processes."

Several countries, such as Ecuador, Costa Rica, Brazil, Bhutan, and Spain, among others, have designed and implemented corridors as a conservation strategy and a practical measure to counteract the loss of biodiversity.

Corridor anatomy. Biological corridors comprise core areas, that are commonly under protection (national parks, biosphere reserves, etc.), and the corridor itself, forming a matrix. Within this matrix, which is composed of different types of land tenure, are carried out economic activities compatible with connectivity, i.e. those which maintain the composition, structure and function of ecosystems and landscape.

Corridors and climate change. The continuity of ecosystem structure has led to the displacement of the species of flora and fauna in the past when there has been climate change. Upon gradual heating or cooling of the planet, species change their distribution to areas more suited to their specific requirements.

At present, climate change is happening much faster than past climate changes. Therefore, corridors become more important because the landscape has been substantially transformed, creating barriers to the movements of species which would naturally occur as an adaptation to increasing temperature. For this reason, it is necessary to maintain and restore corridors that allow this adaptation.



Indigenous Mayans, Guatemala | Photography Juan Pablo Moreiras
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