

**Reconciling Biodiversity Conservation, Protected Areas  
and Agricultural Suitability in Mesoamerica**

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Competition over rural land uses in tropical hotspots is likely to intensify in the 21st century. Mexico and Mesoamerica are good places to illustrate the challenges for conservation. High levels of population growth, high forest fragmentation, high demand for agricultural land, and generally good access mean that there are few areas that are really remote. Gap analysis, based on the distribution of mammal and bird species and existing reserves, indicates that new protected areas and corridors to link them need to be established within this context of rapid forest conversion to other uses. This paper describes results from research on the tradeoffs in the extent and placement of existing protected areas, agricultural suitability, and remoteness -- maximizing complementarity while minimizing conflicts with agriculture productivity and proximity to populated/accessible areas. These results identify, for in detail for Mexico and on a preliminary basis for Mesoamerica, what areas are most important ecologically, and most feasible to establish and maintain based on social and economic data.