

Anthropogenic effects in landscapes: quantification and ecological effects

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The relationship between landscape pattern and landscape processes forms the central hypothesis of landscape ecology; this hypothesis is known as the pattern/process paradigm, and justifies the focus of landscape ecology on pattern analysis. In order to understand the ecological impact of anthropogenic activities, landscape patterns have been analyzed in Brazil, China and the Democratic Republic of the Congo (Katanga province, Kisangani region). Data show the role of anthropogenic pressure in landscape dynamics in Kisangani, the degradation of the Giant Panda habitat in China, the (low) impact of agricultural policy on the configuration of landscape change in Brazil, the impact of anthropogenic land cover change on rodent diversity in Masako (Kisangani), and the extent of forest threatened by mining concessions in Katanga. A study of seven endemic Caesalpinioideae species shows that zones of high potential diversity do not overlap with conservation areas.