

# The Influence of Anthropogenic Activities and Availability of Prey on the Distribution of Dholes in a Dry Deciduous Forest of East Java, Indonesia

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## ABSTRACT

The dhole (*Cuon alpinus*) is one of the least studied endangered top predators inhabiting the Island of Java. Nowadays, their distribution is known to be fragmented and restricted to a few protected areas in the eastern and western parts of the island. An understanding of the response of this species to various environmental conditions in its natural habitat is critical for its conservation and management. We studied the impact of anthropogenic activities and environmental factors on the dhole's distribution in the Baluran National Park in East Java in Indonesia. The impacts of human activities as well as environmental factors on the presence of dholes were studied on 755 plots, which were distributed systematically across the park and their relationships were analyzed using a binomial generalized linear model. We found that the presence of dholes was negatively associated with anthropogenic activities and positively associated with the presence of prey. This suggests that reducing anthropogenic activities and ensuring the availability of natural prey are crucial factors for maintaining the long term survival of this species in their natural habitat.

**Key words:** Anthropogenic activity, environmental factor, generalized linear model, habitat, prey, top predator