PREDICTION OF THE SUITABILITY OF THE MALAYAN TAPIR LANDSCAPE (*TAPIRUS INDICUS*) AT BUKIT BARISAN WILDLIFE RESERVE USING THE MAXENT MODEL

UNDERGRADUATE THESIS

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ABSTRACT

Increasing deforestation and forest fragmentation have reduced the area and quality of habitat for the Malayan tapir (*Tapirus indicus*) in Sumatra. Support the conservation efforts, data and information are needed regarding the Malayan tapir landscape's suitability in the Bukit Barisan Wildlife Reserve (BBWR) habitat. This study used MaxEnt species distribution modeling by looking for Malayan tapirs' signs in 32 sample plots, measuring 2x2 km^2. There were 38 signs of Malayan tapir in the field, which were used as independent variables. At the same time, several environmental predictors were the dependent variable. The MaxEnt analysis results provide an Area Under the Curve (AUC) value of 0.958, which is in the excellent category (usable) in predicting the presence of Malayan tapirs at BBWR. The environmental variable that contributed positively to Malayan tapirs in the BBWR was land use, namely the primary forest landscape, with 73%. Spatially predicting Malayan tapirs' high suitability landscape is 35% (32,994 Ha) of the total BBWR area (94,218 Ha). This study indicates that the suitable landscape category for Malayan tapirs in the BBWR is a relatively undisturbed forest by humans.

Keywords: Malayan tapir, Landscape Suitability, Species Distribution Model, MaxEnt


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