

DISTRIBUSI DAN DENSITAS JULANG EMAS (*Rhyticeros undulatus* Shaw, 1811) DI HUTAN SOKOKEMBANG, KABUPATEN PEKALONGAN, JAWA TENGAH

Oleh

Eveline Wahyuningtias Yusrina Seddi

17/408642/BI/09773

INTISARI

Tingkat deforestasi yang tinggi serta pembukaan lahan menjadi perkebunan kentang dan persawahan di Dieng Plateau mengubah struktur vegetasi Hutan Hujan Tropis serta menyebabkan erosi tanah dan degradasi lingkungan, membuat berdampak pada satwa Julang Emas (*Rhyticeros undulatus*) dalam segi distribusi, densitas, dan habitat yang ideal bagi keberlangsungan Julang Emas. Tujuan dari penelitian ini untuk mengetahui distribusi, densitas, dan model kesesuaian habitat dari Julang Emas di Hutan Sokokembang, Kecamatan Petungkriyono, Kabupaten Pekalongan, Jawa Tengah. Penelitian dilakukan tanggal 22 September-6 Oktober 2021 dengan metode *line transect* untuk mencari keberadaan Julang Emas. Analisis data berupa pola distribusi dan densitas Julang Emas. Titik perjumpaan dan 16 variabel lingkungan berupa agrikebun, agriladang, agrisawah, bangunan, curah hujan, elevasi *non-reclassify*, elevasi *reclassify*, hutan sekunder, jalan, suhu permukaan tanah, NDVI, pemukiman, kelerengan *non-reclassify*, kelerengan *reclassify*, sungai, dan tutupan lahan diuji dengan Maximum Entropy (*Maxent*). Hasil yang diperoleh berupa pola distribusi Julang Emas berkelompok atau *clumped* ($IP > 0$) dan densitas Julang sebesar 3.4 individu/km². Pemodelan kesesuaian habitat Julang Emas di Hutan Sokokembang menghasilkan habitat yang ideal sebesar 56.93 Ha, terkonsentrasi di Desa Kayupuring, Kecamatan Petungkriyono dan Desa Jolotigo, Kecamatan Talun, dan variabel lingkungan yang mempengaruhi berupa elevasi dan kelerengan.

Kata Kunci: Pemodelan Habitat, Julang Emas, Maximum Entropy (*Maxent*).

DISTRIBUTION AND DENSITY OF WREATHED HORNBILL (*Rhyticeros undulatus* Shaw, 1811) IN SOKOKEMBANG FOREST, PEKALONGAN REGENCY, CENTRAL JAVA

By

Eveline Wahyuningtias Yusrina Seddi

17/408642/BI/09773

ABSTRACT

The high level of deforestation and land opening into potato plantations and rice fields on the Dieng Plateau changes the structure of Tropical Rainforest vegetation and causes soil erosion and environmental degradation, making an impact on the Wreathed hornbill (*Rhyticeros undulatus*) in terms of distribution, density, and ideal habitat for the survival of the Wreathed hornbill. The purpose of this study was to determine the distribution, density, and habitat suitability model of the Wreathed hornbill in Sokokembang Forest, Petungkriyono District, Pekalongan Regency, Central Java. The research was conducted on September 22-October 6, 2021 using the line transect method to search for the presence of the Wreathed hornbill. Data analysis in the form of distribution patterns and density of Wreathed hornbill. Encounter points and 16 environmental variables in the form of plantation forest, land fields, agriculture, buildings, rainfall, non-reclassified elevation, reclassified elevation, secondary forest, roads, land surface temperature, NDVI, settlements, non-reclassified slope, reclassified slope, rivers, and land cover were tested with Maximum Entropy (*Maxent*). The results obtained are the distribution pattern of the Wreathed hornbill in groups or clumped ($IP > 0$) and the density of the Wreathed hornbill is 3.4 individuals/km². Modeling the habitat suitability of the Wreathed hornbill in the Sokokembang Forest resulted in an ideal habitat of 56.93 ha, concentrated in Kayupuring Village, Petungkriyono District and Jolotigo Village, Talun District, and influencing environmental variables such as elevation and slope.

Keywords: Habitat modelling, Wreathed hornbill, Maximum Entropy (*Maxent*)