



**KOMUNITAS SATWA LIAR PADA BERBAGAI KONDISI VEGETASI DI
KAWASAN TAMAN NASIONAL ZAMRUD, RIAU**
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INTISARI

TN Zamrud, Riau merupakan salah satu Taman Nasional yang didominasi oleh lahan gambut. Kondisi lahan gambut di Indonesia saat ini mengalami penurunan. Degradasi ekosistem lahan gambut mempengaruhi keanekaragaman hayati yang ada di dalamnya. Untuk itu, penelitian komunitas satwa liar pada berbagai kondisi vegetasi diperlukan untuk melihat bagaimana pengaruh vegetasi terhadap komunitas satwa liar. Penelitian ini bertujuan menggambarkan komunitas satwa liar dan vegetasi pada kawasan TN Zamrud.

Penelitian dilakukan pada 12-25 Oktober 2017. Pengolahan citra dilakukan untuk klasifikasi tutupan lahan pada TN Zamrud. Pengambilan data satwa liar dilakukan berdasarkan kelas satwa, yaitu Aves (burung); mamalia; dan herpetofauna (reptil dan amfibi). Metode *Nested Sampling* digunakan untuk pengambilan data vegetasi. Data fitur habitat diperoleh dengan metode *Protocol Sampling*. Analisis data dilakukan dengan menggunakan Indeks Shannon-Wiener untuk mengetahui keanekaragaman jenis satwa liar dan vegetasi. Distribusi satwa liar diperoleh dengan pembuatan peta persebaran melalui *software ArcGIS*. Indeks Dispersi digunakan untuk memperoleh pola distribusi tiap jenis satwa. Perhitungan INP dilakukan untuk memperoleh tingkat penguasaan vegetasi. Pengaruh kondisi vegetasi terhadap satwa liar dianalisis menggunakan *Generalized Linear Model* (GLM) dengan bantuan software R.

Hasil analisis satwa liar menunjukkan nilai keanekaragaman jenis tiap kelas. Berdasarkan indeks Shannon-Wiener, keanekaragaman jenis satwa liar di TN Zamrud tergolong dalam kategori sedang hingga tinggi ($H' = 1-3$). Pola distribusi satwa liar didominasi oleh pola sebaran acak sebesar 51,39%. Sebagian besar vegetasi di TN Zamrud didominasi oleh jenis Laban (*Vitex pinnata*) dan Paku-pakuan (*Polypodium spp.*). Kondisi vegetasi memberikan pengaruh berbeda pada tiap kelas satwa liar yang terdapat dalam kawasan TN Zamrud.

Kata kunci: keanekaragaman, distribusi satwa liar, aves, herpetofauna, mamalia
pengaruh, GLM (*Generalized Linear Model*), analisis vegetasi

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**WILDLIFE COMMUNITIES UNDER VARIOUS FORMS OF
VEGETATION IN ZAMRUD NATIONAL PARK, RIAU**
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ABSTRACT

Zamrud National Park, Riau is one of the National Parks which is dominated by peatlands. The condition of peatlands in Indonesia is currently experiencing a decline. The degradation of peatland ecosystems affects the biodiversity in it. Research on wildlife communities on various vegetation conditions is needed to see how vegetation affects the wildlife community. This study aims to describe the community of wildlife and vegetation in the Zamrud National Park area.

The study was conducted on 12-25 October 2017. Image processing was carried out for land cover classification in Zamrud National Park. Wildlife data were collected based on animal class, Aves (birds); mammals; and herpetofauna (reptiles and amphibians). Nested Sampling method was used to collect vegetation data. Habitat feature data were obtained by the Protocol Sampling method. Data analysis was carried out using the Shannon-Wiener Index to determine the diversity of wildlife and vegetation species. Wildlife distribution was obtained by making distribution maps of wildlife using ArcGIS software. The distribution pattern of each animal species was analyzed using Dispersion Index. The INP were calculated to obtain the level of vegetation dominance. The effect of vegetation forms on wildlife were analyzed using the Generalized Linear Model (GLM) with R software.

The results of the analysis of wildlife show the value of species diversity for each class. Based on the Shannon-Wiener index, the diversity of wildlife species in Zamrud National Park is classified in the medium to high category ($H'=1-3$). The distribution pattern of wild animals is dominated by a random distribution pattern of 51.39%. Most of the vegetation in Zamrud National Park is dominated by Laban (*Vitex pinnata*) and Pakupakuan (*Polypodium spp.*). Vegetation forms have a different effect on each class of wildlife in the Zamrud National Park area.

Keywords: diversity, wildlife distribution, aves, herpetofauna, mammals, GLM (Generalized Linear Model), vegetation analysis

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