



## **KOMUNITAS BURUNG PADA BERBAGAI STRUKTUR VEGETASI DI SUAKA MARGASATWA PALIYAN**

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### **INTISARI**

Suaka Margasatwa Paliyan merupakan kawasan hutan produksi yang dialihfungsikan menjadi hutan konservasi. Peralihan fungsi tersebut dilakukan dalam kondisi awal kawasan yang rusak berat sehingga dilakukan rehabilitasi. Namun, terdapat intervensi oleh masyarakat dalam bentuk penanaman tanaman komersial di dalam kawasan. Hal tersebut berpengaruh terhadap struktur dan komposisi vegetasi, yang akan berdampak pada komunitas burung di dalamnya. Penelitian ini bertujuan untuk mengetahui bagaimana pengaruh struktur dan komposisi vegetasi terhadap komunitas burung di Suaka Margasatwa Paliyan.

Penelitian dilakukan di Suaka Margasatwa Paliyan pada bulan basah (April) dan bulan kering (September) tahun 2021. Terdapat 48 plot pengamatan dengan jarak antar plot 200 m. Pengambilan data burung menggunakan metode *point count*, sedangkan data vegetasi diambil dengan metode *nested sampling*. Variabel vegetasi yang diambil meliputi tingkat pertumbuhan, jenis, jumlah, diameter, dan tinggi. Hasil pengamatan burung dianalisis berdasarkan jumlah jenis dan jumlah individu yang ditemukan, sedangkan data vegetasi dianalisis dengan Indeks Nilai Penting. Faktor penyusun struktur dan komposisi vegetasi yang berpengaruh terhadap komposisi jenis burung dianalisis dengan *Generalized Linear Model* (GLM). Analisis *Kruskal-Wallis* dilakukan untuk mengetahui perbedaan komposisi jenis burung antar tipe habitat.

Komposisi jenis burung pada musim hujan dipengaruhi secara positif oleh jumlah jenis pohon, serta dipengaruhi secara negatif oleh tutupan tajuk dan jumlah jenis pancang. Komposisi jenis burung pada musim kemarau dipengaruhi secara negatif oleh jumlah jenis pancang dan variabel lain yang diduga di luar faktor biotik penyusun struktur dan komposisi vegetasi. Hasil analisis *Kruskal-Wallis* di musim hujan menunjukkan bahwa terdapat perbedaan komposisi jenis burung yang signifikan antara tipe habitat hutan dengan ladang dan antara hutan dengan agroforestri.

**Kata Kunci:** *komunitas burung, struktur vegetasi, Suaka Margasatwa Paliyan*

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## BIRD COMMUNITY ON VARIOUS VEGETATION STRUCTURE IN PALIYAN WILDLIFE RESERVE

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### ABSTRACT

Paliyan Wildlife Reserve is a production forest area that has been converted into conservation forest. This conversion was done in the initial condition of the area heavily damaged, so rehabilitation was carried out. However, there is intervention by the community in the form of planting commercial crops. This affects the structure and composition of the vegetation, which will have an impact on the bird community in it. This study aims to determine how the vegetation structure and composition affects the bird community in the Paliyan Wildlife Reserve.

The study was conducted at the Paliyan Wildlife Reserve in the wet month (April) and dry month (September) in 2021. There were 48 observation plots with a distance between plots of 200 m. Bird data was collected using the point count method, while vegetation data was collected using nested sampling. Vegetation variables taken include growth type, species, number of individuals, diameter, and height. Results from bird observations were analyzed based on the number of species and the number of individuals found, while the vegetation data were analyzed using the Important Value Index. Factors of structure and vegetation composition that affect the bird composition were analyzed using the Generalized Linear Model (GLM). Kruskal-Wallis analysis was conducted to determine differences in bird species composition between habitat types.

The composition of bird species during the rainy season was positively influenced by the number of tree species, and negatively influenced by canopy cover and the number of sapling species. The composition of bird species during the dry season is negatively influenced by the number of sapling species and other variables that are thought to be outside the biotic factors sampled. The result of Kruskal-Wallis in the rainy season showed that there were significant differences in bird composition between forest and cultivation types and between forest and agroforestry.

Keyword: *bird community, vegetation structure, Paliyan Wildlife Reserve*

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