

KEANEKARAGAMAN JENIS DAN DISTRIBUSI SPASIAL HERPETOFAUNA DI SUAKA MARGASATWA SERMO, KULON PROGO, DAERAH ISTIMEWA YOGYAKARTA

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INTISARI

Suaka Margasatwa (SM) Sermo, Kulon Progo, Daerah Istimewa Yogyakarta, merupakan kawasan hutan yang mengalami pengalihan fungsi dari hutan produksi menjadi hutan konservasi. Keberadaan herpetofauna mulai dikesampingkan karena dianggap tidak penting oleh kebanyakan manusia. Di sekitar kawasan SM Sermo terdapat jalan utama dan beberapa aktivitas masyarakat, seperti pada loket masuk kawasan wisata Waduk Sermo yang berada di dalam kawasan Suaka Margasatwa. Dengan adanya jalan di dalam kawasan SM Sermo dapat menimbulkan fragmentasi habitat. Hal ini tentunya memengaruhi keanekaragaman jenis dan distribusi herpetofauna di kawasan SM. Penelitian ini bertujuan untuk mengetahui keanekaragaman, distribusi dan pola dispersi herpetofauna di dalam kawasan SM Sermo.

Penelitian ini dilakukan pada tanggal 9-19 Februari 2018. Metode yang digunakan dalam penelitian ini yaitu, *Visual Encountering Survey* (VES) dengan kombinasi *Line Transect*. Data yang diamati berupa jenis herpetofauna, jumlah individu, titik koordinat perjumpaan herpetofauna, serta suhu dan kelembaban lingkungan. Analisis data menggunakan Indeks Shannon-Wiener untuk mengetahui keanekaragaman jenis. Distribusi herpetofauna diolah dengan *software ArcGIS* berdasarkan koordinat perjumpaan satwa yang di-*overlay* ke dalam peta SM Sermo. Pola dispersi tiap jenis herpetofauna dianalisis menggunakan Indeks Dispersi.

Hasil penelitian diperoleh 18 jenis herpetofauna yang terdiri dari 14 jenis reptil dan 4 jenis amfibi, dengan jumlah 71 individu. Berdasarkan Indeks Shannon-Wiener, keanekaragaman jenis herpetofauna di kawasan SM Sermo termasuk dalam kriteria sedang (reptil=2,07; amfibi=1,07; dan herpetofauna=2,36). Distribusi herpetofauna ditampilkan dalam bentuk peta distribusi herpetofauna di SM Sermo. Pola dispersi herpetofauna di SM Sermo didominasi oleh pola sebaran acak sebanyak 13 jenis, sedangkan pola sebaran mengelompok 5 jenis.

Kata kunci: herpetofauna, reptil, amfibi, keanekaragaman, distribusi, spasial, Suaka Margasatwa Sermo, Kulon Progo, Daerah Istimewa Yogyakarta

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DIVERSITY AND SPATIAL DISTRIBUTION OF HERPETOFAUNA IN SERMO WILDLIFE RESERVE, KULON PROGO, SPECIAL REGION OF YOGYAKARTA

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ABSTRACT

Sermo Wildlife Reserve, Kulon Progo, Special Region of Yogyakarta, is a forest area that has transferred its function from production forest to conservation forest. The existence of herpetofauna began to be ruled out because it is considered unimportant by most humans. Around Sermo Wildlife Reserve area there is a main road that is often encountered some people activities, such as at the entrance booth Sermo Reservoir tourism area within the area of Wildlife Reserve. With the main roads within Sermo Wildlife Reserve area, its cause habitat fragmentation. This certainly affect the diversity and the distribution of herpetofauna within Sermo Reserve area. The aims of study are to determine the diversity, the distribution, and the spatial pattern of herpetofaunain the Sermo Wildlife Reserve.

This research was conducted on February 9th-19th, 2018. The method used in this research is Visual Encountering Survey (VES) with Line Transect combination. The observed data were the species of herpetofauna, the number of individuals, the encounter coordinate points of herpetofauna, as well as temperature and humidity of the environment. Data analysis used Shannon-Wiener Index to determine species diversity. The distribution of herpetofauna was processed by ArcGIS software based on the coordinate of the wildlife encounters, which overlaid onto Sermo Wildlife Reserve's map. The dispersion pattern of each species of herpetofauna were analyzed using Dispersion Index.

The results obtained 18 species of herpetofauna consisting of 14 species of reptiles and 4 species of amphibians, with a total of 71 individuals. Based on the Shannon-Wiener Index, the diversity of herpetofauna species in the Sermo Wildlife Reserve area is included in moderate criteria (reptile=2,07; amphibians=1,07; and herpetofauna=2,36). Distribution of herpetofauna was shown on distribution of herpetofauna in Sermo Wildlife Reserve's map. The dispersion pattern of herpetofauna is dominated by random dispersion pattern of 13 species, while the aggregated dispersion pattern is 5 species.

Keywords: herpetofauna, reptile, amphibians, diversity, distribution, spatial, Sermo Wildlife Reserve, Kulon Progo, Special Region of Yogyakarta

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