

KEANEKARAGAMAN JENIS BURUNG DI KAWASAN SEMPADAN SUNGAI DAERAH ISTIMEWA YOGYAKARTA

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Intisari

Kawasan sempadan sungai menjadi kawasan dengan tingkat kerentanan tinggi akibat berbagai macam aktivitas manusia. Akibatnya, kualitas habitat di dalamnya mengalami penurunan dari aspek biofisik kawasan. Penurunan tersebut berdampak pada keanekaragaman jenis satwa yang tinggal di dalamnya salah satunya burung. Penelitian ini bertujuan untuk mengidentifikasi keanekaragaman jenis burung serta mengetahui pengaruh faktor-faktor lingkungan terhadap keanekaragaman jenis burung di kawasan sempadan sungai Opak, Sungai Gajahwong, dan Sungai Code.

Pengamatan keanekaragaman jenis burung menggunakan metode *point count* yang diletakkan secara *systematic random sampling* di tiap sempadan sungai. Pengamatan faktor lingkungan menggunakan metode *nested sampling* dan *protocol sampling*. Keanekaragaman jenis burung dianalisis menggunakan indeks keanekaragaman *Shannon-Wiener*. Analisis *Generalized Linear Model* (GLM) digunakan untuk mengetahui pengaruh variabel lingkungan terhadap keanekaragaman jenis burung. *Canonical Correspondence Analysis* (CCA) digunakan untuk memvisualisasikan respon burung terhadap variabel lingkungan yang berpengaruh. Analisis statistik dilakukan menggunakan perangkat lunak *R Statistics 3.6.1*.

Berdasarkan observasi lapangan, terdapat 3972 individu burung tercatat dari total 37 jenis burung yang teramati. Kekayaan jenis burung tertinggi serta indeks keanekaragaman jenis tertinggi ditemukan di Sungai Opak. Setiap sungai didominasi oleh jenis seperti bondol jawa, burung gereja, dan merbah cerukcuk. Kondisi biofisik kawasan sempadan sungai seperti jarak dari sumber air dan tutupan vegetasi berpengaruh positif terhadap keanekaragaman jenis burung. Perlu adanya monitoring serta penanaman jenis pohon buah yang mengakomodasi kebutuhan berbagai macam burung. Pengayaan jenis vegetasi memberikan peluang berbagai macam jenis burung untuk mendapatkan sumber pakan. Adanya variasi tutupan vegetasi akan memberikan koridor satwa untuk bergerak serta mempengaruhi iklim mikro kawasan tempat satwa tinggal.

Kata kunci: Biodiversitas, Komunitas Burung, Riparian, Ekologi Perkotaan, Daerah Istimewa Yogyakarta

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BIRD DIVERSITY ALONG RIPARIAN AREA IN DAERAH ISTIMEWA YOGYAKARTA

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Abstract

Riparian area is a high level of vulnerability due to various kinds of human activities. As a result, the quality of riparian area has decreased from the biophysical aspect. This decrease has an impact on the bird diversity that live in it. This study aims to identify bird diversity and to determine the effect of the environmental factors on bird diversity in Opak, Gajahwong, and Code River.

The point count method with systematic random sampling was carried out to survey bird diversity. Environmental factors were recorded using nested sampling and protocol sampling. Bird diversity was analyzed using the Shannon-Wiener diversity index. Generalized Linear Model (GLM) was used to determine the effect of environmental variables on bird diversity. Canonical Correspondence Analysis (CCA) was used to visualize bird responses to environmental variables. Statistical analysis was performed using R Statistics 3.6.1 software.

Based on field observations, there were 3972 individual birds recorded from a total of 37 bird species observed. The highest bird species richness and the highest species diversity index were found in the Opak River. Each river is dominated by species such as javan munia, old world sparrows, and yellow-vented bulbul. The biophysical conditions such as distance from water sources and vegetation cover have a positive effect on bird species diversity. It is important to monitoring and planting of fruit tree species to accommodate various kinds of birds. Enrichment of vegetation types provides opportunities for various types of birds to obtain food sources. The variation in vegetation cover will provide corridors for animals to move and affect the microclimate of the area where animals live.

Keyword: Biodiversity, Bird Community, Riparian, Urban Ecology, Daerah Istimewa Yogyakarta

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