



Kemelimpahan komunitas burung air di ekosistem hutan bakau Segara Anakan, Cilacap

Lu'lu'ul Aulia (18/429370/BI/10136)
Pembimbing : Prof. Dr. Tjut Sugandawaty Djohan, M.Sc.

INTISARI

Penelitian ini mempelajari kemelimpahan burung air di ekosistem hutan bakau Segara Anakan (SA) di *mud-flat* Tirang Malang Baru (TMB) dan *mud-flat riverine* Motean-Klaces. Ekosistem hutan bakau SA rusak pohon bakaunya 7 batang per ha. Padahal daun pohon bakau merupakan sumber energi utama berbasis detritus dan produk akhirnya nutrien yang mendukung perikanan di ekosistem *sea-scape*. Akibatnya burung air kehilangan tempat bertengger dan bersarang. Di SA juga mengalami sedimentasi tinggi 4,5 juta ton per tahun, mengakibatkan turbiditas tinggi dan perairan dikoloni *Harmful Algal Blooms*. Akibatnya ikan, makanan burung air sedikit. Penelitian kemelimpahan burung air dilakukan dengan metode sensus. Aktivitas burung air, bertengger, mencari makan di *mud-flat*, dan arah terbangnya juga dicatat. Pengamatan dilakukan tiga hari, dan setiap hari data dicuplik pagi hari sebelum matahari terbit dan sore hari menjelang matahari terbenam pada 14-16 Safar 1443. Hasil penelitian menemukan 14 spesies burung air, dikelompokkan dalam empat fungsional grup: *large wading birds (lwb)*, *small wading birds (swb)*, *fish-eater*, dan *diving birds*. Cacah individu dan cacah spesies tertinggi di kedua lokasi ialah fungsional grup *swb*. Di *mud-flat* TMB, *Ardeola speciosa* dan *Egretta garzetta* dominan berturut-turut 1436 dan 822 individu. Fungsional grup *swb* paling banyak memanfaatkan pohon bakau, *Avicennia alba* untuk bertengger dan bersarang serta memanfaatkan *mud-flat riverine* Motean-Klaces untuk singgah. Sebaliknya, *lwb*, *Leptoptilos javanicus* mencari makan di *mud-flat* TMB akan tetapi tidur dan bersarang di hutan Pulau Nusakambangan. Status *L. javanicus* dan *Centropus nigrorufus* *Vulnerable*. *Large wading birds*: *Ardea purpurea*, *Ciconia episcopus*, dan *Mycteria cinerea* tidak lagi ditemukan pada penelitian ini.

Kata kunci: *large wading birds*, *small wading birds*, *mud-flat riverine*, *Leptoptilos javanicus*



The abundance of waterbird communities in the mangrove forest ecosystem of Segara Anakan, Cilacap

Lu'lul Aulia (18/429370/BI/10136)

Supervisor: Prof. Dr. Tjut Sugandawaty Djohan, M.Sc.

ABSTRACT

This research studied the abundance of waterbirds in the Segara Anakan (SA) mangrove forest ecosystem in the Tirang Malang Baru (TMB) mud-flat and the Motean-Klaces riverine mud-flat. The SA mangrove ecosystem was damaged and only has 7 mangrove trees per hectare. In fact, mangrove tree leaves are the main energy source based on detritus and the product is a nutrient that supports fisheries in the sea-scape ecosystem. Waterbirds consequently lose their perches and nesting sites. Additionally, SA experiences 4.5 million tons of sedimentation per year, which results in excessive turbidity and waters with a colony of Harmful Algal Blooms. Fish and waterbirds are consequently fed a little. Research on the abundance of water birds was carried out using the census method. We also observed waterbird activity, perching, foraging in the mudflat, and flight direction. On the 14–16 Safar 1443, observations were taken, and data was gathered every day before sunrise and before sunset. The results of the study found 14 species of waterbirds, grouped into four functional groups: large wading birds (lwb), small wading birds (swb), fish-eaters, and diving birds. The swb functional group has the most number of individuals and species at both sites. With 1436 and 822 individuals, respectively, *Ardeola speciosa* and *Egretta garzetta* dominated the TMB mud-flat. The mangrove trees, *Avicennia alba*, are mostly used by the swb as roosting and nesting sites. Before heading to the ricefield, they additionally stopped at the Motean-Klaces riverine mud-flat. *Leptoptilos javanicus*, lwb in contrast, sleeps and builds its nests in the forests of Nusakambangan Island while foraging in the TMB mud-flat. *Leptoptilos javanicus* and *Centropus nigrorufus* were both categorized as Vulnerable on the IUCN Redlist. The lwb: *Ardea purpurea*, *Ciconia episcopus*, and *Mycteria cinerea* were no longer found in this study.

Keywords: large wading birds, small wading birds, mud-flat riverine, *Leptoptilos javanicus*.