

Eryk Hendrianto, 2002, **Diversitas Burung Air Ardeidae di Delta Solo Ujung Pangkah Gresik**. Skripsi ini di bawah bimbingan Drs. Moch. Affandi, M.Si., dan Drs. Trisnadi Widyaleksono C. P. M.Si., Jurusan Biologi Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Airlangga, Surabaya.

ABSTRAK

Penelitian tentang burung air Ardeidae telah dilakukan di Delta Solo Ujung Pangkah Gresik, dengan tujuan untuk mengetahui spesies burung air Ardeidae apa saja, beserta kelimpahan, dan dominansi spesies, serta tingkat diversitasnya. Data spesies dan kelimpahan burung dikumpulkan menggunakan metode "Concentration Count" pada lima stasiun yang kondisi lingkungannya berbeda dengan alat bantu teropong binokuler, teleskop medan dan alat cacah tangan. Pada setiap stasiun dilakukan pengamatan sebanyak 6 kali masing-masing selama 30 menit, dimulai jam 06.30 hingga jam 18.00 WIB dengan interval waktu di antara dua pengamatan selama 2 jam. Pengenalan spesies menggunakan buku panduan lapangan "Burung-burung di Sumatera, Jawa, Bali, dan Kalimantan oleh MacKinnon *et al.*, 1999". Data yang didapat dianalisis menggunakan indeks dominansi didasarkan kelimpahan relatif, indeks kesamaan antar habitat Oosting dan indeks diversitas Shannon Weaver. Burung air Ardeidae yang dijumpai sebanyak 12 spesies, yaitu *Ardea cinerea*, *Ardeola bacchus*, *Ardeola speciosa*, *Bulbucus ibis*, *Butorides striatus*, *Egretta alba*, *Egretta garzetta*, *Egretta intermedia*, *Egretta sacra*, *Gorsachius melanolophus*, *Ixobrychus sinensis*, dan *Nycticorax nycticorax*. Indeks dominansi tertinggi pada *Egretta garzetta* yakni sebesar 42,27%, sedangkan indeks dominansi terendah terdapat pada *Ardeola bacchus*, *Bulbucus ibis*, *Egretta sacra*, *Gorsachius melanolophus*, dan *Ixobrychus sinensis* sebesar 0,26%. Burung air Ardeidae yang merupakan spesies dominan adalah *Egretta garzetta*, *Ardeola speciosa*, dan *Egretta alba*. Indeks diversitas burung air Ardeidae berkisar antara 1,116 hingga 1,386 yang kesemuanya berada pada level diversitas rendah. Diversitas burung air Ardeidae cenderung lebih tinggi pada daerah dataran lumpur daripada daerah tambak dan mangrove. Tingkat kesamaan spesies antar stasiun terbesar didapati antara stasiun II dan stasiun III yaitu 65,12%, sedangkan untuk tingkat kesamaan keseluruhan stasiun sebesar 41,80%.

Kata kunci : burung air, Ardeidae, diversitas, Delta Solo, lahan basah, dominansi

Eryk Hendrianto, 2002, **The Diversity of Water Birds of Ardeidae in Delta Solo Ujung Pangkah Gresik**. This scription is guided by Drs. Moch. Affandi, M.Si. and Drs. Trisnadi Widyaleksono C. P. M.Si., Biology Department, Faculty of Mathematics and Natural Sciences, Airlangga University, Surabaya.

ABSTRACT

Research on water birds family, Ardeidae, was done in Delta Solo Ujung Pangkah Gresik, and the aim of the research was to know the occurrence of the Ardeidae species, it abundance, dominance, and diversity. Concentration count was method used to collect species data and its abundance. Five difference stations were observed to collect data, and binocular, field telescope, and handy counter were use in this observation. In each station observations were done six time which was 30 minutes duration for each, and two hours interval. For species identification a field guide book by MacKinnon *et al.*, 1999 was used. Relative abundance was used to calculate domination index and similarity index between pairs among the five stations were calculated according to Oosting index, and Shannon Weaver index was used to know the species diversity index. The result of this research as follow: 12 species of Ardeidae were identified in this area, they were: *Ardea cinerea*, *Ardeola bacchus*, *Ardeola speciosa*, *Bulbucus ibis*, *Butorides striatus*, *Egretta alba*, *Egretta garzetta*, *Egretta intermedia*, *Egretta sacra*, *Gorsachius melanolophus*, *Ixobrychus sinensis*, and *Nycticorax nycticorax*, the higher dominance's index was *Egretta garzetta* (42,27%), other wise among 12 species five species had lowest one (0,26%). Among the Ardeidae species in the observed area the most dominance were *Egretta garzetta*, *Ardeola speciosa*, and *Egretta alba*. The diversity indices of the five stations were between 1,116 to 1,386, it indices the diversity was low. The diversity in the mudflats was higher than in the mangrove and fishponds. The higher similarity between pairs among the five stations was found between station II and station III (65,12%), but for all five stations the similarity was 41,80%.

Key words: water bird, Ardeidae, diversity, Delta Solo, wetlands, domination.