KAJIAN EKOLOGIS WILAYAH PESISIR DAN LAUT UNTUK ATRAKSI EKOWISATA BAHARI DI TAMAN NASIONAL TELUK CENDERAWASIH

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RINGKASAN

Penelitian ini bertujuan untuk: 1). Mengetahui kondisi ekologis terhadap ekosistem wilayah pesisir dan laut yaitu ekosistem terumbu karang di Pulau Pepaya dan Pulau Nurage-Manimage Taman Nasional Teluk Cenderawasih Kabupaten Nabire serta 2.) menganalisis kesesuaian ekosistem wilayah pesisir dan laut yaitu ekosistem terumbu karang di Pulau Pepaya dan Pulau Nurage-Manimage sebagai atraksi ekowisata bahari di Taman Nasional Teluk Cenderawasih Kabupaten Nabire. Penelitian menggunakan metode observasi lapangan, pengambilan data karang menggunakan metode *Point Intercept Transect (PIT)* sedangkan pengamatan ikan karang menggunakan metode *underwater visual census* (UVC). Data yang diperoleh dianalisa untuk memperoleh penutupan karang hidup, keanekaragaman dan kelimpahan ikan karang dan selanjutnya dianalisa dengan matriks kesesuaian lokasi wisata.

Hasil penelitian menunjukkan bahwa kajian ekologis parameter lingkungan perairan wilayah pesisir dan laut pulau Pepaya dan pulau Nurage Manimage pada kedalaman 5 dan 10 meter ditunjukan dengan suhu (29°C), Salinitas (33-35 permil), Kecepatan Arus (15-19 m/det), Kecerahan (>70%). Namun lebar hamparan datar karang pulau Pepaya lebih lebar (315-625 meter) dibandingkan pulau Nurage Manimage (75-95 meter). Untuk penutupan karang hidup di pulau Pepaya kedalaman 5 meter adalah 50,67% (baik) dan pada kedalaman 10 meter adalah 39,67% (sedang). Sedangkan tutupan karang hidup di pulau Nurage Manimage pada kedalaman 5 meter adalah 30,33% (kategori sedang) dan kedalaman 10 meter adalah 34% (kategori sedang).

Keanekaragaman (H') dan kelimpahan spesies ikan karang di pulau Pepaya menunjukan nilai tertinggi untuk kelompok ikan Target dengan indeks Keanekaragaman (H') yaitu 2,761 (melimpah sedang) dan kelimpahan spesies yaitu 0,035 jenis/m² di kedalaman 10 meter, sedangkan kelimpahan individu ikan karang tertinggi untuk kelompok ikan Mayor yaitu 3,835 ekor/m² di kedalaman 5 meter. Di pulau Nurage Manimage Keanekaragaman (H') dan kelimpahan spesies ikan karang menunjukan nilai tertinggi untuk kelompok ikan Target dengan indeks Keanekaragaman (H') yaitu 3,001 (melimpah tinggi), dan kelimpahan spesies yaitu 0,033 jenis/m² sedangkan kelimpahan individu ikan karang tertinggi untuk kelompok ikan mayor yaitu 2,036 ekor/m², semuanya pada kedalaman 10 meter.

Hasil analisis kesesuaian ekowisata pulau Pepaya dan pulau Nurage Manimage sebagai atraksi ekowisata bahari menunjukan pulau Pepaya memiliki Indeks Kesesuaian Wisata (IKW) lebih tinggi daripada pulau Nurage Manimage

yaitu IKW wisata selam 77,8% (sesuai), wisata snorkeling 77,2% (sesuai) di kedalaman 5 meter, dan wisata pantai 96,4% (sangat sesuai).

Kata kunci : Kajian Ekologis, Wilayah Pesisir dan Laut, Ekowisata Bahari.Atraksi Ekowisata Bahari

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ECOLOGICAL STUDIES OF COASTAL AND MARINE AREAS FOR THE ATTRACTIONS OF MARINE ECOTOURISM IN TELUK CENDRAWASIH NATIONAL PARK

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ABSTRACT

This research aims to: 1) Know ecological condition the ecosystem in coastal and marine areas, including the ecosystem of coral reefs in Pepaya Island and Nurage-Manimage Island in Teluk Cendrawasih National Park , the Regency of Nabire, and 2) to analyze the suitability of the ecosystem of coastal and marine areas, including the ecosystem of coral reefs in Pepaya Island and Nurage-Manimage Island as the attractions of marine ecotourism in Teluk Cendrawasih National Park, the regency of Nabire. This research was carried out from December 20011 until January 2012. This research uses the method of field observation; the data retrieval uses the method of Point Intercept Transect (PIT), while the observation of coral fish uses the method of Underwater Visual Census (UVC). The acquired data is analyzed to get the covering living coral, the variety and the abundance of coral fish are analyzed by using the matrix of tourism site suitability.

The analysis results show that the ecological studies by using the parameter of aquatic environment of coastal and marine areas of Pepaya and Nurage-Minimage Island at a depth of 5 and 10 meter is indicated by the temperature (29°C), salinity (33-35 per mill), current speed (15-19 m/sec), the brightness (>70%). However, the width of spread out of coral flat area in Pepaya Island is wider (315-625 meter) than Nurage-Manimage Island (75-95 meter). The covering living coral in Pepaya Island at the depth of 5 meter is 50.67% (good category) and at the depth of 10 meter is 39.67% (moderate category). Whereas, the covering living coral in Nurage-Manimage at the depth of 5 meter is 30.33% (moderate category) and at the depth of 10 meter is 34% (moderate category).

The variety (H') and the abundance of coral fish species in Pepaya Island shows the highest value for the group of target fish with the variety index (H') is 2.761 (moderately abundant) and the abundance of the species is of 0.035 type/m^2 at the depth of 10 meter, while the the highest of individual abundance of coral fish for the group of the major fish is of 3.835 head/ m^2 at the depth of 5 meter. In Nurage Manimage Island, the variety (H') and the abundance of the species of coral fish shows the highest value for the group of target fish with the variety index (H') is 3.001 (highly abundant), and the species abundance is of 0.033 type/ m^2, while the highest individual abundance of coral fish for the major fish is 2.036 head/ m^2, all of them is at the depth of 10 meter.

The analysis results of the ecotourism suitability in Pepaya Island and Nurage Manimage Island, as the attraction of marine ecotourism, show that Pepaya Island has the higher *Indeks Kesesuaian Wisata* (IKW), or the index of tourism

suitability, than on Nurege Manimage Island, namely: the index of tourism suitability for diving tourism is 77.8% (suitable), snorkeling tourism is 77.2% (suitable) at the depth of 5 meter, and coastal tourism is 96.4% (very suitable)

Keywords: Ecological studies, Coastal and marine areas, the attractions of marine Ecotourism

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