

ABSTRAK

Kawasan Konservasi Perairan Nusa Penida, Bali memiliki potensi keanekaragaman hayati yang tinggi khususnya terumbu karang. Keindahan tersebut dapat menarik wisatawan untuk berkunjung. Ekosistem terumbu karang tersebut dapat terancam oleh adanya faktor alam dan manusia. Penelitian ini bertujuan untuk mengetahui persentase tutupan karang keras, genus karang keras, dan perbandingan persentase tutupan karang keras pada kedalaman 3 dan 10 m. Pengambilan data dilakukan dengan menggunakan metode survei. Pengamatan terumbu karang menggunakan metode *Underwater Photo Transect (UPT)*, karang diidentifikasi dengan *Coral Finder*. Tutupan karang dianalisis dengan *software Coral Point Count with Excel Extensions (CPCe)*. Persentase tutupan karang keras kedalaman 3 m dalam kondisi sedang (32,09%), sedangkan kedalaman 10 m dalam kondisi tinggi (38,31%). Terdapat 35 genus karang keras yang ditemukan, genus karang yang ditemukan didominasi oleh genus *Acropora*, *Montipora*, dan *Porites*. Presentase tutupan karang pada kedalaman 10 m lebih tinggi dibandingkan pada kedalaman 3 m. Pengawasan dan perhatian penuh terhadap aktivitas wisata di sekitar KKP Nusa Penida, Bali diperlukan agar ekosistem terumbu karang lebih baik.

Kata kunci: Persentase, Tutupan, Genus, Nusa Penida, Kedalaman 3 dan 10 m.



ABSTRACT

Nusa Penida Marine Protected Area has high potency in biodiversity. Especially coral reef that attract tourist to visit. The coral reef ecosystem could be threatened by natural and human factors. This research aimed to know the coral cover percentage, and the genus of corals, and comparison between coral reefs condition at 3 m and 10 m depths. Data collection was conducted using survey method. *Underwater Photo Transect* (UPT) and Coral finder were used for coral reefs data collection and to identify the genus of the coral respectively. Software *Coral Point Count with Excel Extension* (CPCe) was applied to analyze the cover of coral reefs. The percentage of hard coral cover at a depth of 3 m was in medium condition (32, 09%) while at the depths 10 m was in high condition (38, 31%). There were 35 genera of hard coral found, which dominated by *Acropora*, *Montipora*, and *Porites*. The percentage of coral cover at a depth of 10 m was higher than the depth of 3 m. Supervision and full attention to tourism activities around the Nusa Penida MPA, Bali is needed so that the coral reef ecosystem is better.

Keywords: Percentage, Cover, Genus, Nusa Penida, Depth 3 m and 10 m.

