

ABSTRAK

Penelitian ini berjudul “Kajian Kondisi Terumbu Karang (*Hard Coral*) Dan Ikan Karang Tahun 2016–2018 di Perairan Buton Sulawesi Tenggara”. Tujuan penelitian untuk mengetahui kondisi persentase tutupan karang (*Hard Coral*), biomassa dan struktur komunitas ikan karang yang meliputi kelimpahan, keanekaragaman, keseragaman, dominansi, mengetahui hubungan persentase tutupan karang dengan biomassa dan struktur komunitas ikan karang. Metode yang digunakan yaitu metode survei, sampel diambil dengan metode *Underwater Photo Transect* (UPT) selanjutnya dianalisis menggunakan CPCe, *Underwater Visual Census* (UVC) dan *Sticks*. Berdasarkan hasil penelitian, diketahui bahwa kondisi persentase tutupan karang (*Hard Coral*) termasuk kategori sedang (2016: 28,88% ; 2017: 37,28% ; 2018: 35,76%). Biomassa ikan karang tahun 2016 - 2018 termasuk kategori rendah (548,3 - 967,3kg/ha). Kelimpahan ikan karang termasuk kategori melimpah (206,53 - 290,90/350m²). Keanekaragaman (H') ikan karang termasuk kategori sedang (1,84 - 2,18). Keseragaman (E) ikan karang termasuk kategori tinggi (0,80 - 0,83). Dominansi (C) ikan karang termasuk kategori rendah (0,18 - 0,23). Hubungan persentase tutupan karang (*Hard Coral*) memiliki korelasi yang rendah terhadap biomassa ($r=0,203$), hubungan persentase tutupan karang (*Hard Coral*) terhadap struktur komunitas ikan karang memiliki korelasi yang bervariasi, meliputi kelimpahan ($r=0,332$; rendah), keanekaragaman (H') ($r=0,465$; sedang), keseragaman (E) ($r=0,132$; sangat rendah), dominansi (C) ($r=0,440$; sedang).

Kata Kunci: Tutupan karang; ikan karang; UPT(*Underwater Photo Transect*; UVC (*Underwater Visual Census*))

ABSTRACT

This research is entitled "Study of the Condition of Coral Reefs (Hard Coral) and Coral Fish on 2016–2018 in Buton Waters, Southeast Sulawesi". The research objective was to determine the condition of the percentage of coral cover (*Hard Coral*), biomass and community structure of reef fish which included abundance, diversity, uniformity, dominance, to determine the relationship between the percentage of coral cover and the biomass and structure of the reef fish community. The method used is the survey method, the sample was taken using the Underwater Photo Transect (UPT) method then analyzed using CPCe, Underwater Visual Census (UVC) and Sticks. Based on the research results, it is known that the condition of the percentage of coral cover (Hard Coral) is in the medium category (2016: 28.88% ; 2017: 37.28% ; 2018: 35.76%). The reef fish biomass on 2016 - 2018 was categorized as low (548.3 - 967.3 kg/ha). The abundance of reef fish is categorized as abundant (206.53 - 290.90/350m²). Diversity (H') of reef fish is in the medium category (1.84 - 2.18). Uniformity (E) of reef fish is in the high category (0.80 - 0.83). The dominance (C) of reef fish is in the low category (0.18 - 0.23). The relationship between the percentage of coral cover (Hard Coral) has a low correlation to biomass ($r=0.203$), the relationship between the percentage of coral cover (*Hard Coral*) to the structure of the reef fish community has varied correlations, including abundance ($r=0.332$; low), diversity (H') ($r=0.465$; moderate), uniformity (E) ($r=0.132$; very low), dominance (C) ($r=0.440$; moderate).

Keywords: Coral Cover; coral fish; UPT (Underwater Photo Transect); UVC (Underwater Visual Census)