IMPLEMENTATION OF FOTOGRAMETRY TECHNIQUES AS BODY WEIGHT ESTIMATION OF INDO-PACIFIC BOTTLE NOSE DOLPHIN (Tursiops aduncus) IN DOLPHIN LODGE BALI

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ABSTRACT

This study was aimed to estimate indo-pasifik bottlenose dolphin (*Tursiops aduncus*) body mass through photogrammetric techniques. Dolphins were experts in appendix 2 which must be considered for sustainability. Bad management of dolphins will cause stress. Morphometrics measurements need to be done to see the condition of the dolphin's body. The data used were indo-pacific bottlenose dolphin (*Tursiops aduncus*) residing under professionally managed care. Dolphins are photographed with lateral position and ventral position. The results of the photograph will be measured in the lateral position, there is a lateral length, L1, L2, L3, and L4. Measurements in the ventral position are ventral lengths, D1, D2, D3, and D4. The measurement data obtained by reading with ImageJ will then be calibrated and analyzed by simple linear regression. From the results of regression analysis of dolphins weighted in lateral position with L2 has a value ($R^2 = 0.984$) and lateral position with D2 ($R^2 = 0.958$)

Key words: Indo-pacific bottlenose dolphin, *Tursiops aduncus*, photogrammetric, estimate body weight.