

A Preliminary Study on Factors Determining the Success of High Conservation Value Area in Oil Palm Plantations

Authors : Yanto Santosa, Rozza Tri Kwatrina

Abstract : High Conservation Value (HCV) is an area with conservation function within oil palm plantation. Despite the important role of HCV area in biodiversity conservation and various studies on HCV, there was a lack of research studying the factors determining its success. A preliminary study was conducted to identify the determinant factor of HCV that affected the diversity. Line transect method was used to calculate the species diversity of butterfly, birds, mammals, and herpetofauna species as well as their richness. Specifically for mammals, camera traps were also used. The research sites comprised of 12 HCV areas in 3 provinces of Indonesia (Central Kalimantan, Riau, and Palembang). The relationship between the HCV biophysical factor with the species number and species diversity for each wildlife class was identified using Chi-Square analysis with Cross tab (contingency table). Results of the study revealed that species diversity varied by research locations. Four factors determining the success of HCV area in relations to the number and diversity of wildlife species are land cover types for mammals, the width of area and distance to rivers for birds, and distance to settlements for butterflies.

Keywords : wildlife diversity, oil palm plantation, high conservation value area, ecological factors

Conference Title : ICEM 2018 : International Conference on Ecosystems Management

Conference Location : Sydney, Australia

Conference Dates : October 04-05, 2018