

ABSTRACT

POPULATION DYNAMICS OF WILD BOAR (*Sus scrofa*) BASED ON CAMERA TRAP RELATED TO AFRICAN SWINE FEVER CASES IN BUKIT BARISAN SELATAN NATIONAL PARK

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Wild boar (*Sus scrofa*) is a key prey species for the sumatran tiger, with a wide distribution, including the Intensive Protection Zone (IPZ) of Bukit Barisan Selatan National Park (BBSNP). However, infectious diseases pose a threat to wild boar populations. In 2019, African Swine Fever (ASF) affected both domestic and wild pig populations in Indonesia, resulting in over 250 confirmed cases: 85% in domestic pigs, 14% in wild boars, and 1% in bornean bearded pigs. The impact of ASF on wild boars in natural habitats remains poorly understood. This study analyzed wild boar population dynamics during the ASF epidemic (2015, 2019, and 2022) using camera traps in the IPZ, under the BBSNP program in collaboration with WCS-IP. Independent Event (IE) and Relative Abundance Index (RAI) were calculated using RStudio to assess abundance and presence levels. Results showed significant population dynamics ($p < 2.2e-16$). In 2015, wild boars were relatively abundant (RAI = 3.53; IE = 310), with abundance increasing in 2019 (RAI = 11.8; IE = 1093) before declining sharply in 2022 (RAI = 0.76; IE = 52). These fluctuations are likely influenced by the ASF epidemic. Further monitoring and conservation efforts are essential to protect wild boars as critical prey species in their habitat.

Keywords: wild boar (*Sus scrofa*), dynamics population, African Swine Fever (ASF), camera trap, Bukit Barisan Selatan National Park