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Analysis on the habitat use of bearded pigs in Sarawak

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Abstract

Bearded pigs can be found in a variety of habitats in Sarawak ranging from beaches to high elevation forests. A review of the literature suggests that their distribution is highly dependent on soil, fruiting and drainage. Bearded pigs have been considered as common in Bornean Malaysia but are now listed as 'Vulnerable' in the IUCN Red List. However, little is known about their habitat preferences. The main focus of this study is to understand the habitat utilisation of the bearded pigs in the protected forests of Sarawak. Five locations were investigated: Bako National Park, Kuching Wetlands National Park, Tanjung Datu National Park, Samunsam Wildlife Sanctuary, and a High Conservation Value Forest near Bintulu We used infra-red sensor cameras, a non-invasive method to gather information on bearded pigs over large survey areas and for several months at a time. Total of 32 camera-traps including models from Reconyx and Bushnell were used for 36 locations between March 2012 and November 2013. Occupancy analysis using PRESENCE 2.0 shows that Beach forest and Mixed Dipterocarp Forests are more likely to be inhibited, compared to Kerangas (Heath) forest. Additional sampling and effort is needed to further investigate the habitat preference between protected areas by increasing the number of camera trap locations in different habitats.

Keywords: Camera-trapping survey, habitat preferences, occupancy, Sarawak

Introduction

Sarawak has an area of about 124000 km², stretches over some 700 kilometres along the north-eastern coast of the island of Borneo. In general it is divided into three regions – coastal lowlands comprising peat swamp as well as narrow deltaic and alluvial plains, a large region of undulating hills ranging to about 300 metres, and the mountain highlands extending to the Kalimantan border.

The bearded pig can be found in Malaysia (Malay Peninsula, Sabah, and Sarawak), Brunei Darussalam, Indonesia (Kalimantan, and Sumatra), and the Philippines (Kawanishi et al., 2008). It is recorded throughout Borneo including offshore islands (Payne et al., 1985). Bearded pigs were fairly abundant until relatively recently (Caldecott et al. 1993). It is now listed as 'Vulnerable' (IUCN, 2014) because of a population decline, estimated to be more than 30% over the last twenty years. Indeed, it is the victim of heavy hunting, habitat degradation and fragmentation.

Sus barbatus (Figure 1) is an omnivorous mammal which primarily feeds on fruits, but also roots, nuts



Fig. 1: A bearded pig was detected by camera trap in Bako National Park, Sarawak. This individual was photographed probably while foraging for food on forest floor.

