



ECOTOURISM CONSERVATION POTENTIAL OF PROBOSCIS MONKEY (*Nasalis larvatus*) AT SAMUNSAM WILDLIFE SANCTUARY, SARAWAK, MALAYSIA

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ABSTRACT

The Proboscis monkey (*Nasalis larvatus*) is estimated to be approximately 160 individuals left in Samunsam Wildlife Sanctuary (SWS) and 1000 individuals left in Sarawak. The population of proboscis monkey is decreasing since this species is fragile to habitat loss and habitat destruction that live within only 10% of the total protected areas (TPA's) gazetted in Sarawak. A river boat survey conducted in 2014-2015 showed an average of 0.305 groups/km surveyed. The abundance recorded is much higher than the two previous studies conducted in 2001 and 2004. Unfortunately, the construction of the Sarawak Pan Borneo Highway from Sematan to Kg. Telok Melano that crossed over the Samunsam River gives a big impact on the abundance and survival of proboscis monkey in the future. Thus, the study proposed that conservation efforts on proboscis monkey can be increased through ecotourism activities. Through highly potential ecotourism activities, it can help to trigger conservation awareness to the public and also bring economic benefits to the local communities.

Keywords: Samunsam Wildlife Sanctuary, *Nasalis larvatus*, sarawak, ecotourism and conservation.

1. Introduction

The Proboscis monkey (*Nasalis larvatus*) is endemic to the island of Borneo. It is classified by the *IUCN Red List of Threatened Species* (IUCN, 2008) as being endangered with a population trend that is decreasing. This species is prohibited in all commercial trade under Appendix I of the CITES and is listed as a 'totally protected' animal by the Sarawak Forestry Department (SFD). It is one of the monkeys from the old world from the family Cercopithecidae. that has two subfamilies, the Colobinae and Cercopithecinae (Oates & Davies, 1994). Proboscis monkey is under the subfamily Colobinae that encompasses over 30 species throughout Africa and Asia (Oates & Davies, 1994). It is also known as *rasong*, *belang pinggang*, *bekantan*, and *monyet belanda* (Dutch monkey) by the various local people.

In their social organization, the most typical group types in proboscis monkey are the one-male group that consists of an adult male, females and their offspring; and all-male (bachelor) group that consists of adult males and male juveniles. The main causes of all-male (bachelor) group type are due to inbreeding avoidance and sexual competition avoidance (Boonratana, 1999). The proboscis monkey is an arboreal (tree-dwelling) primate that is known to use three main forest types which are the mangrove forest, riverine forest, and peat swamp forest (Sha et al., 2011). Habitat loss causes the populations of the proboscis monkey to highly decrease that it is estimated to be only 1000 individuals left in Sarawak (Bennett & Sebastian, 1988) and a bit more abundant in Sabah with 6000 individuals (Sha et al., 2011).

According to Bismark (1994), proboscis monkey consumes exclusively 98.25% on leaves, shoots, unripe fruits, and flowers. The changes in habitat structure will affect the food resources and total number of proboscis monkey present in their habitat because this species focus on habitat quality that makes it relatively intolerant to habitat disturbances (Yeager, 1992; Bennet & Gombek 1993). In Sarawak, Samunsam Wildlife Sanctuary and Bako National Park show the highest densities in high forest and mangrove forest along the coast followed by riparian vegetation (Salter et al., 1985).

Bennet and Gombek (1993) stated that hunting and illegal logging are two major factors that cause the decrease of the population of proboscis monkey in the last 20 years in Sarawak. In Kalimantan, the population of proboscis monkey is declining due to hunting activities by non-Muslim Dayaks in inland areas; in Sabah, proboscis monkey seems flexibly distributed within areas dominantly by Muslim groups that religiously do not hunt monkeys (Sha et al., 2011). Samunsam Wildlife Sanctuary (SWS) have experienced active logging activities since 1984 that occur in the tributaries and water catchment area of the upper part of Samunsam River in Gunung Pueh Forest Reserve boundaries