



GAMUDA PARKS

A SUSTAINABLE LANDSCAPE INITIATIVE

GAMUDA
COVE

SUMMARY OF
**BIODIVERSITY
ASSESSMENT**
FOR GAMUDA COVE,
DENGKIL



09.2018

OWNERSHIP OF :

GAMUDA LAND

PREPARED BY :

ESC

EXECUTIVE SUMMARY

EnviroSolutions & Consulting Sdn Bhd (ESC) - partner of Inogen Environmental Alliance - has been engaged by Gamuda Land (T12) Sdn Bhd to conduct a Biodiversity Assessment as to support Gamuda Land's objective to ascertain the level of biodiversity in their developments and identify ways to increase/enhance biodiversity in the area moving forward. This Biodiversity Assessment provides the baseline study in which the report will illustrate current site conditions in which current biodiversity is identified and where species recovery/ retention rate can be monitored.

The aims of the study are as follows:

- Verification of surrounding flora types and conditions (through secondary data and site study of surrounding area);
- Identification of existing wildlife in the area;
- Develop a checklist of the surveyed vertebrates (mammals, birds, amphibians, and reptiles). Insects that were found during the survey are also described in the checklist as additional information to the scope of work;
- Propose strategies and measures that will restore the health of the area which will fortuitously stabilise and encourage the positive return of fauna to the area; and
- Develop a Biodiversity Management Plan on tracking wildlife recovery and restitution rate for the area.

To facilitate the above, ESC conducted The Biodiversity Assessment consists of two main components, namely:

- Field assessment – a survey of the flora and fauna components of the subject site, and
- Data review and assessment.

As this assessment forms the baseline data for future studies, a full flora and fauna survey of the site was undertaken on April 2018. Based on the satellite image and on-site survey, the Project site is dominated by shrubs, secondary forest, wild Acacia forest and oil palm plantation with some part of the area cleared for other development. Meanwhile, the surrounding areas are dominated by agricultural lands, forest reserve and wetland forest. Summary of the biodiversity assessment and its management plan are as follow:

Flora Assessment

The flora survey was conducted on 4th, 7th and 12th April 2018 by using sampling plot of 0.4 ha (20 x 20 m) to assess the existing conditions; to determine the flora composition of Project site; and to determine the flora composition including undergrowth and non-woody species. In the area where sampling plots are not possible to be established, a 50 m line transect was used to assess the occurrence of the flora species. The flora survey had 37 sampling points within the Project site which consists of 16 sampling plots and 21 lines transects.

A total of 8 species were recorded within the sampling plots while 42 species were found along the line transect. The most dominant species found during the flora survey is *Acacia mangium* followed by *Macaranga pruinosa* and *Melicope lunu-akenda*.

Based on the site survey and IUCN Red List, there are no rare, threatened or endemic species found within the Project site. Most of the species were categorised as Not Evaluated (NE), which means the taxa have not yet been assessed for IUCN Red List and also Least Concern (LC) species. Some of the species were not recorded in the IUCN Red List. Most of the flora species found during the survey are common species which have neither conservation nor high economic value. However, some of the plant species encountered are important species for the birds as they are food sources e.g *Ficus* spp.

Fauna Assessment

Fauna species associated with the swampy area, oil palm plantations, scrubs, open grasslands and secondary forests area are expected to be found. The fauna assessment for Gamuda Cove was performed based on two data collection methods i.e. primary data collection and secondary data collection. The sampling and inventories of fauna species at the project site were conducted on 12th and 14th April 2018. The species were observed and recorded via binoculars, animal calling, identification of footprints, nests, scats and faeces. Survey for these species was carried out from day to night (0730 hours until 2230 hours) at 9 different points within the project boundary. Published article on Paya Indah Wetlands was also reviewed to ensure the completeness of the information.

Fauna survey conducted at Gamuda Cove found various species ranging from mammals, birds to insects and herpetofauna. In short, mammals study documented 11 species from 9 different families. Birds study documented 59 species of 27 families at the project site of which 50 birds are resident species, 7 are migratory and 2 are introduced. Of these, 39 are classified as Totally Protected Species while the remaining 12 are Protected species under the Wildlife Conservation Act 2010.

The next biodiversity assessment will be done in the next 2-5 years to monitor the increase in the level of biodiversity in the development. If the biodiversity has improved, it is evidenced that the ecosystem that has been created is sustainable and healthy for the biodiversity - and by reference it is also good for human wellbeing.

1 INTRODUCTION

1.1 Background

Gamuda Cove development comprises 1,530 acres of leasehold mixed-use development located next to Expressway Lingkaran Tengah, in Kuala Langat, Selangor. It is situated within the Mukim of Tanjong Dua Belas, 8 kilometres southwest of Cyberjaya/Putrajaya and approximately 34 kilometres and 37 kilometres southwest of Petaling Jaya Town and Kuala Lumpur City Centre respectively. Designed with the idea of “Living Close to Nature”, Gamuda Cove incorporates 60 acres of Central Park, a landscape feature which incorporates natural and manmade lakes/wetland. Construction will take place in phases. The first phase of construction has started at the site.

Gamuda Cove borders the Paya Indah Wetlands to the south and Kuala Langat Forest Reserve to the north. As such, keeping the design philosophy in mind, Gamuda Land is taking steps to ensure that their Gamuda Cove development is congruent with the surrounding environment. Gamuda Land aims to conserve and enhance biodiversity as well as raise awareness of the importance of wildlife and ecosystems. EnviroSolutions & Consulting Sdn Bhd (ESC) has been engaged by Gamuda Land to conduct a Biodiversity Assessment as part as this initiative. Biodiversity was defined by the United Nation Earth Summit in 1992 as “the variability among living organisms from all sources, including, inter alia, terrestrial, marine and other aquatic ecosystems, and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems.” This Biodiversity Assessment provides the baseline study in which the report will illustrate current site conditions in which current biodiversity is identified and where species recovery/ retention rate can be monitored over a regular period of time. The results from these regular surveys will determine how well the built environment is sustained.



Flora & Fauna Found On Site

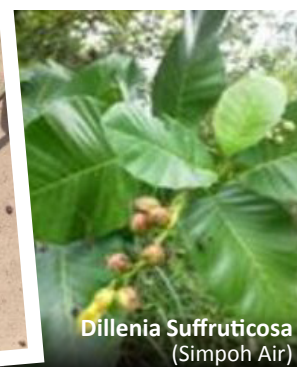
Flora		47 species - Special species: Melicope lunu-ankenda (will be tagged, conserved and transplanted in Gamuda Cove)
Fauna	Birds	51 species
	Mammals	11 species
	Insects	14 species
	Reptiles	8 species



Mallotus Paniculatus
(Gelam)



Footprint of Malayan Porcupine (Hystrix brachyura)



Dillenia Suffruticosa
(Simpoh Air)

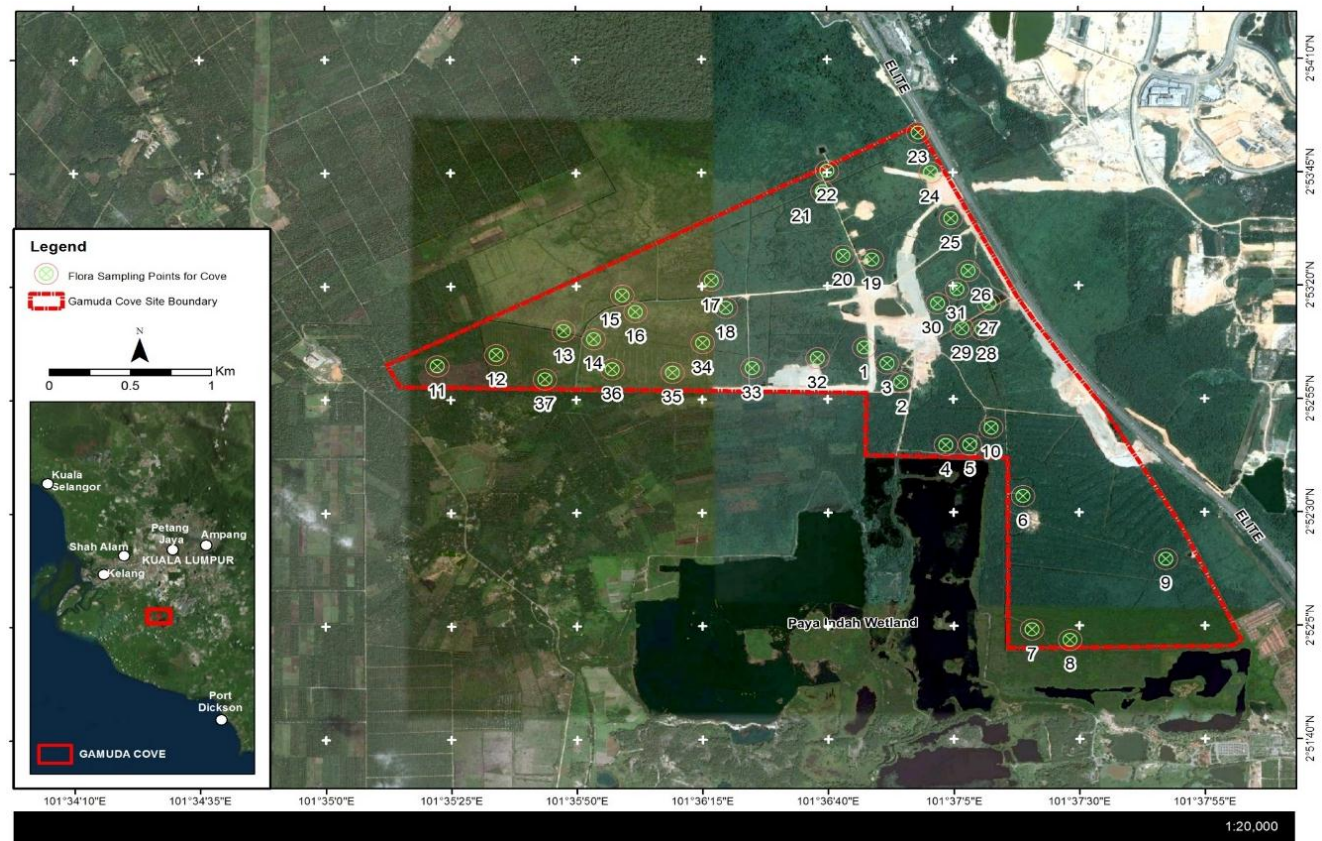


Melicope Lunu-ankenda
(Pepauh/Tenggek Burung)



Nymphaea Pubescens
(Telipok)

FLORA SAMPLING LOCATION WITHIN GAMUDA COVE BOUNDARY



FLORA SPECIES THAT ARE SIGHTED IN GAMUDA COVE



FAUNA SAMPLING LOCATION WITHIN GAMUDA COVE BOUNDARY



FAUNA SPECIES THAT ARE SIGHTED IN GAMUDA COVE

