

RESEARCH COLLABORATION OPPORTUNITY

Research Collaboration Opportunity Ref No.: RCO-CUGE-2020-04

Project Title: *Investigations into the human dimensions of human-wildlife interactions in Singapore*

1. Key Challenges and Objectives

- 1.1 In Singapore, the frequency of Human-Wildlife Interactions (HCI) is observed to have increased significantly in the last few years and has even gained sustained media attention. This increase in HCI can be contributed by both the greening efforts in the urban environment, making it liveable for certain wildlife, and expansion of urban areas closer to wildlife habitat. As Singapore moves from a 'City in a Garden' towards building a 'City in Nature' with the implementation of more naturalised landscapes in urban parks and streets, one can expect that HCI will continue to increase.
- 1.2 HCI can be characterised by many functions (see Soga & Gaston 2019) such as positive (benefits) and negative (conflicts), intentional or unintentional interactions. There are very few existing literatures that explore shifts in the types of HCI in the local context. Information on the types of HCI that exist in urban and natural spaces across Singapore and the perceptions of residents will be useful to make predictions on how interactions may change with the development of urban spaces. This will serve as a baseline for NParks to anticipate opportunities or challenges to formulate appropriate outreach and education efforts moving forward.
- 1.3 We are seeking research collaborators as a Co-PI for this study to answer the following research questions:
 - (i) How can human-wildlife interactions be characterised in Singapore in nature and urban spaces?
 - (ii) How do residents perceive interactions with wildlife?
 - (iii) What are key factors that lead to negative HCI and perceptions of wildlife?
- 1.4 Interested collaborators are requested to submit proposals to carry out a holistic assessment on the dimensions to the HCI issue in Singapore, so that the outcomes will guide operations and education development moving towards a healthy and harmonious City in Nature. The proposed project should include (but not be limited to):
 - (i) Description of methods to collect information for characterising of Human-Wildlife Interactions in Singapore. They should describe methods for the different wildlife species where necessary. Wildlife species should include long-tailed macaques

(*Macca fascicularis*), wildboars (*Sus scrofa vittatus*), smooth-coated otters (*Lutrogale perspicillata*), palm civets (*Paradoxurus hermaphroditus*), various species of snakes and bats as well as a number of urban bird species.

- (ii) Description of methods to understand the perceptions of residents such as population surveys, interviews, ground observations or big data mining to gain a comprehensive insight into the dimensions of human-wildlife interactions in Singapore.

2. Minimum Project Deliverables

The deliverables described here represent the minimum outcomes arising from the proposed project. Additional relevant deliverables that are proposed will be favourably considered during project evaluation.

- (i) Develop datasets that measures and characterises human-wildlife interactions and the perceptions of residents with key factors for negative interactions and perceptions.
- (ii) Guidelines and recommendations for managing negative human-wildlife interactions and encouraging positive interactions.
- (iii) One scientific publication and one non-scientific publication, as a co-author with NParks.
- (iv) Progress reports at mid-way mark, and a final report at the end of the project.

3. Budget Limits

3.1 The proposed budget cannot exceed \$300,000. Proposals that exceed this limit will not be considered. Please note that this amount is simply an indication of budget availability, not an estimate of expected project cost.

3.2 The project duration should also not exceed 1.5 years. Proposals requiring more than 1.5 years can be considered, but with strong justification.

3.3 Please note that NParks' decision on the funding support to be awarded for the project is final.

4. Submission Instructions

Proposals for the Research Collaboration Opportunity as stated above must be submitted to Ms Kathleen Yap at kathleen_yap@nparks.gov.sg by 13th Nov 2020, 1200 hrs.

5. Enquiries

For transparency, all enquiries and associated clarifications will be published (without details on the identity of the person making the enquiry) on the Research Collaboration Opportunity page on the CUGE website. We regret that phone enquiries will not be entertained.

For enquiries, please contact Ms Kathleen Yap at kathleen_yap@nparks.gov.sg.