**Using anonymized mobile data to quantify human-wildlife interactions in protected areas**

Abstract

Introduction

Cities are rapidly expanding, creating new challenges for managing urban greenspaces. More than half of the global population currently live in cities and that number is projected to increase to almost 90% by the end of the century (citations). As these cities increase in size and area, greenspaces, such as parks, remnant natural areas, and protected reserves, face new stressors from human activity. Direct human use of green spaces can negatively impact urban wildlife including trampling, introduction of exotics, and pollution (citations). However, urban green spaces are important for city residents as a place for exercise, recreation, socialization, and supporting mental well-being (citations). Thus, managing these spaces is a delicate balancing act between utility for people and conservation of biodiversity.

One of the main limitations in effectively managing urban greenspace is the uncertainty around how and when people use these areas.