Primate survey in a Bornean flooded forest: evaluation of best approach and best timing

Abstract

Accurate determination of the abundance and distribution of animals, particularly endangered species, is a fundamental requirement for understanding their ecology and has important applications for their conservation. In Bornean flooded forests, various approaches have previously been used to conduct primate census, including foot-based land surveys and boat-based river surveys at different times of the day such as in the early morning and/or late afternoon. However, the accuracy of primate encounter frequencies and animal counts obtained using these methods has not been assessed. Therefore, in this study, we attempted to assess the accuracy of these methods used in different studies. We found that boat-based river surveys were more accurate than foot-based land surveys for evaluating the abundance and distribution of Bornean primates, particularly proboscis monkeys (Nasalis larvatus) and long-tailed macaques (Macaca fascicularis). Furthermore, based on our evaluation of boat-based river surveys at different times of the day, we recommend that such surveys be performed in the late afternoon to yield more accurate estimates of the abundances and distributions of Bornean primates.