

Project Update: March 2018

STATUS OF OBJECTIVES

Obj. 1: To estimate geographical range and identify dispersal pathways of the Indian bullfrog

We successfully completed this objective and the results have been communicated to the Department of Environment and Forests, in our annual report for 2018.

Obj. 2: Assessing population density and habitat preference

We completed data collection for this component in 2017 and analyses is currently underway. We expect to finish this objective by April 2018.

Obj. 3: Evaluating impact on small vertebrates and mechanisms of impact

This objective was successfully carried out and the results have also been communicated to the Department of Environment and Forests.

Obj. 4: Formulating management plan based on modelling invasive spread under various management scenarios

This objective required data from Obj. 1, Obj. 2, and field data on breeding biology. We already have information from the two objectives. We intend to gather the remaining data in the monsoon (May-July 2018) and evaluate models in August 2018.

Obj. 5: To advocate the prevention of further introduction and spread of the bullfrog.

We have been continuously updating the Department of Environment and Forests through annual reports and project meetings. However, our standing recommendations needed to be urgently modified due to the recent introduction (2017) of the bullfrog to the previously unoccupied Little Andaman Island. We have notified the Department of the recent incursion and advised immediate removal, as the population is limited in distribution. We intend to hold meetings with stakeholders (Dept. of Fisheries, Dept. of Agriculture, CIARI) in May, 2018.

OUTREACH AND OUTCOMES

- **Mohanty NP, Measey GJ (in review)** what's for dinner? Diet and trophic impact of an invasive anuran *Hoplobatrachus tigerinus* on the Andaman archipelago, *PeerJ*.
- **Mohanty NP, Measey GJ (in review)** reconstructing biological invasions using public surveys: a new approach retrospectively assess spatio-temporal changes in invasive spread, *Biological Invasions*.
- **Mohanty NP, Sachin A, Selvaraj G, Vasudevan K (2018)** Using public surveys to reliably and rapidly estimate the distributions of multiple invasive species on the Andaman archipelago. *Biotropica* 50: 197-201.
- Presented the outcomes of the project at the conference "Economic and ecological impacts of invasive alien species", held in Indian Statistical Institute, Kolkata, India – February, 2018
- Presented the project results for the University of Technology Sydney, Australia, at an educational program, held at the Andaman and Nicobar Environment Team, South Andaman – February, 2018.
- Participated in a community awareness generation program ('ANET Open Day 2018') and discussed island invasive species with a focus on the Indian bullfrog,

held at the Andaman and Nicobar Environment Team, South Andaman – February, 2018.

- Presented the outcomes of the project at the Annual Research Meetings of Center for Invasion Biology and Department of Botany and Zoology, Stellenbosch University – November, 2017

