

Project Update: April 2010

Inception of Fieldwork

Whilst the project began officially in September 2009, we began to pilot our bird sampling methods in July 2009. This was initiated by Eden Cottee-Jones, a biogeography student based at the University of Oxford. Survey methods were designed and standardised prior to implementing the project, and a robust sampling protocol was devised. Prior to starting fieldwork, team members were trained in the sampling methods and were given a preliminary overview of how the data gathered was going to be analysed.

Major Activities (September 2009 – February 2010)

Identification and mapping of Ficus in the non-reserve matrix

All major *Ficus* species in the area were identified with the help of a professional botanist. This involved preparing herbarium sheets and collection of the hypanthodium. The major species identified in the area include *Ficus bengalensis*, *F. racemosa*, *F. religiosa*, *F. hispida* and *F. glomerata*.



Subsequently, the entire non-reserve matrix was divided into different blocks and all major *Ficus* trees in the area were mapped using a GPS. An inventory of c. 300 trees in the area was created, and a database with details of the species, their location, size (height and dbh), and associated human structures (e.g. temples / houses / sitting area) was compiled.

Assessment of the role of Ficus in providing resources for Frugivores

Focal observations of birds on *Ficus* trees were conducted by the research team led by Jatin Tamuly (Principal Field Investigator). This involved daily 4-hour observations of birds in fruiting *Ficus* trees, starting before sunrise and ending once bird activities began to decline. Information on the species and number of birds visiting, number of figs consumed and feeding behaviour were collected. A total of c. 200 hours of observation has been completed. This will be continued until the end of August 2010.



Assessment of threats to Ficus and Frugivores

Between November and January 2010, semi-structured interviews were conducted by to explore local perceptions of *Ficus* and frugivores. An ethnographic approach was undertaken to understand how local practices relate to *Ficus* in the area, and we spent extensive time in temples and village hangouts to see how people interacted with 'landmark' trees in their neighbourhood. Results from the ethnographic technique will be written up in July 2010, after conducting some more observations.

Based on these semi-structured interviews, a quantitative questionnaire taking into consideration local sensitivities has been designed. The questionnaires will examine local perceptions of *Ficus* and frugivores, and will seek to answer reveal the practices that lead to peoples' willingness to conserve trees in the area. These questionnaires were tested in a pilot run in the beginning of February, and a sampling frame across the landscape has been devised. We aim to collect 300 questionnaire responses by the end of April 2010. Data from these questionnaires will be used to design a conservation campaign.

Overall Assessment

The project so far has been according to plan. Some challenges faced so far include the lack of fruiting trees. There have been periods of no fruiting activity, indicating that there may be other periods in the year when figs come into fruit. This has slowed down the number of observations of fruiting figs that we expected, but has allowed us to conduct the people-oriented part of the project more intensively.

Planned Future Activities

- Between March and April 2010, we hope to complete the questionnaire surveys. We also hope to write up a working paper on local perceptions of *Ficus* by end of May 2010.
- We devise a conservation strategy based on this data, and conduct awareness programmes in local schools (May-August 2010).
- We plan to start an experimental *Ficus* nursery in one of the villages and explore culturally-sensitive ways of encouraging local people to plant figs in their home-gardens.
- Bird sampling on figs will be carried out throughout the project period; we hope to do some preliminary data analysis at the end of April 2010.
- Finally, the preliminary data analysis will then be used to devise an impact plan that will chalk out a strategy for publicizing our work and to create public / media interest in the *Ficus* trees of Assam.