FINAL REPORT

I hereby present a summary of the major achievements of my project. Overall, the study has been a success, yielding

1. the finding of a new population of *Aproteles bulmerae*, the rarest flying fox on earth;
2. the initiation of a long term monitoring program of *Dobsonia moluccensis*, a heavily hunted bat in Papua New Guinea;
3. training of the first chiropterologist in Papua New Guinea, Kore Tau;
4. Kore's near completion of the honours thesis at the University of Papua New Guinea;
5. Silvia Lomascolo's near completion of her Ph.D. dissertation;
6. training of another Papua New Guinean female student, Francesca Dem, in field techniques recording of frugivorous bats in the field.

I took the first trip to Herowana village, in the Highlands of Papua New Guinea (PNG) in March of 2004. Kore Tau came with me to be trained and start the monitoring program of *Dobsonia moluccensis*. With data obtained from the monitoring program, Kore would complete the fieldwork for her honours thesis at the University of Papua New Guinea. This first fieldtrip lasted two weeks and allowed us to visit a cave and three stone holes inhabited by *Dobsonia moluccensis*, mist net and do some censuses at the entrance of the cave/stone holes. We were also able to strengthen the ties with villagers so Kore could eventually continue this project on her own. Two more fieldtrips followed up, the second one in July 2005 and the third one in September-October of 2005. Kore obtained enough data for her honours thesis. She is writing about seasonality and synchronicity of reproduction in *Dobsonia moluccensis*, and the ecological and human-activity-related characteristics in caves that determines roosting choices in these bats. The conclusions of this study are that *Dobsonia moluccensis* breeds aseasonally and asynchronally. *Dobsonia moluccensis* seems to choose roosting sites randomly with respect to human disturbance (distance to the nearest village and gardens) as well as ecological and structural characteristics measured. Kore is writing up her thesis and we will be publishing a manuscript together as soon as she is done with the requirements for her honours. A major finding yielded by this project is that our study site has a population of *Aproteles bulmerae*, an extremely rare bat that was thought to have gone extinct, until Dr. Tim Flannery found one population in 1993. This is the second population known for this bat.

The other part of this project consisted of videotaping *Ficus* trees (hereafter figs) to identify what types of fruits bats prefer. This is part of my dissertation, which aims at determining what fruit characteristics attract different types of dispersers. *Ficus* is a good plant to focus on because it is distributed throughout tropical forests worldwide and is an important resource for bats and other frugivores.

Although data analysis is still under way, preliminary analyses show that bats do not have strong preferences in particular fruits. They seem to feed on any fruit that they run into. I suspect that strong odor might be one important characteristic, but I'm still working on lab analysis of the samples brought from the field. The preliminary work was presented at the 4th International Symposium on Frugivores and Seed Dispersal, which took place in Brisbane, Australia, between 9-16 of July 2005. For this part of the project I trained another Papua New Guinean female student, Francesca Dem. She successfully completed her "subproject" and now went on to join a local conservation NGO.

The monitoring program of *Dobsonia moluccensis* will continue as soon as Kore completes her Master's degree. She is now applying for scholarships to study in the US or Australia, and will continue her work with flying foxes as soon as she is able to get back to the field. I will be applying for further funding at that stage and will hopefully be able to return to PNG and continue to work with Kore.