Lessons from the CTFS-AA experience

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20 Forest Plots in 15 Countries
More than 75 Partner Institutions Worldwide
Barro Colorado Island
Gatún Lake, Panama
CTFS OBJECTIVES

- To study representative biodiverse tropical rain forests throughout the world;
- To investigate ecological and evolutionary factors determining differences among these forests;
- To monitor their long-term dynamics and to investigate the drivers of forest change;
- To research ecological and economical means of sustainable management of tropical forests;
- To provide field and analytical training in tropical forest biology and management.
FOREST RESEARCH PLOT

- Large scale (16-52 ha)
- All stems ≥1 cm mapped, measured, tagged, and identified to species
- Entire plot recensused every 5 years
CTFS Plot Methods: Tree enumeration
CTFS Plot Methods: Field identification
CTFS Plot Methods: Specimen collection
CTFS Plots: Supplementary field studies
Elements of the Course

1) Six weeks
2) ~20 students from ~10 countries
3) Taught by specialists (10-15 resource staff)
4) Structured course program / syllabus
5) Emphasis on –
   1) Developing research questions
   2) Experimental design and data analysis
   3) Oral presentations and report writing
6) Groups projects
7) Independent projects – final week
8) Course symposium and proceedings
Course Program / syllabus

Week 1-2 Introduction to plants, insects, vertebrates, statistics includes ‘identification’ and ‘sampling issues’
Also presentations by students on own research projects

Week 3 Excursion to different forest type (often montane)
Group project – 20 questions

Week 4-5 Ecology component – soils and plant distribution, pollination, seed dispersal, evolution and molecular ecol.
Based around one day – staff led practicals

Week 5-6 Independent projects

End Course symposium (write ups handed in)

- Course handbook (abstracts)
- PDF library
- Internet (pros & cons)
Course excursions
Developing research questions

Group projects

1) Groups of 3
2) 20 questions (1 day)
3) Two presentation of research ideas
4) Project 3 field days (two weeks to write up)

Independent projects

1) Singly or pairs
2) 1\textsuperscript{st} presentation of research proposal 1 week before
3) 2\textsuperscript{nd} presentation of research proposal 2 days before
4) 3\textsuperscript{rd} presentation of research proposal evening before
5) Five days field work
6) Three days to write up
Discussion

(2) Spatial pattern and distribution

Course symposium
PROCEEDINGS
OF THE
CENTER FOR TROPICAL FOREST SCIENCE – ARNOLD ARBORETUM
INTERNATIONAL FIELD BIOLOGY COURSE 2006

Sinhara World Heritage Site, Sri Lanka
30 July – 28 August 2006
Edited by Min Sheng Khoo, Cynthia Hong-Wa, and Rhett D. Harrison

CENTER FOR TROPICAL FOREST SCIENCE – ARNOLD ARBORETUM
INTERNATIONAL FIELD BIOLOGY COURSE 2007

Xishuangbanna Tropical Botanic Garden, Yunnan Province, China
2 Sep – 13 Oct 2007
Edited by Manju Vasudevan, Chinthaka D. Kaluthota, and Rhett D. Harrison
1) Groups pre-arranged, mix sexes and nationalities
2) Insistence on English
3) Exposing students to criticism
4) Final projects cannot be done on topic close to own research project
5) Final project cannot be done with someone from same country
Course Aunty!

1) Attends to needs of students
2) Some logistic arrangements
3) Accounts
4) Shoulder to cry on
Asia-Pacific Tropical Field Course Program

Proposal to expand current field courses to three per year with additional shorter courses

To be formed under the umbrella of the ATBC Asia-Pacific Chapter

Initial membership agreement will involve a commitment to send 1-2 students annually

Official signing to take place at ATBC Bali 2010 (July)
Post course excursion
Thank You