LBA ND-11 Team Meeting Academia de Tenis Resort 9:00AM-5:00PM

Participants:

(Cornell) Johannes, Susan, Andy, Shinjiro, Mark, Ted, Stefan
(UFMT) Carlos, Eduardo, Luis Carlos, Evandro, Léo, João Paulo, Péricles, Elenara, Mara, Daniela, Silvana, Maria José

Agenda:

- 1. Review of potential publications
- 2. Field work plan for 2004-2005
- 3. Issues to discuss

Review of potential publications: (based on the publication list from Fortaleza meeting)

Publications		Author
1.	Biomass and structure of forest Vines > 10 cm and > 30 cm?	Ted/Léo
2.	Relation of spatial variability of forest to soils and topography/water table Vines $> 10 \text{ cm} \text{ and} = 10 \text{ cm}$	Stefan/Léo
2a.	Relation of forest composition to soils and topography	Carlos
3.	Model of soil landscape and controls on vegetation	Susan/Eduardo/ Carlos
4.	Biomass of regeneration after cutting with relation to clearing and soils (Block 5)	Elenara
	Regeneration of forest (Block 5)	Maria José
4b.	Impact of logging on exports of nutrients and damaged trees/ residues	Ted/Stefan
5.	Growth and biodiversity (species) of forest affected by logging type	Carlos
6.	Allometric and volumetric equations. Collaboration with Euler (Bruce) < 30cm	Carlos/Maria José
7.	Nutrient and biomass exports from logging in relation to forest and soil stocks, as well as export to streams	Johannes
8.	Properties and distribution of soils in microbasins	João Paulo
9.	Nutrient exports in microbasins in relation to soils and vegetation/vines (> 10cm)	Mark/Johannes/ Evandro
10.	Hydrology of microbasins – pathways of water flow in soil in relation to soil properties	Mark
11.	Pathways and sources of TOC and DOC in microbasins	Evandro/Mark
12.	In stream and surface water DOC/CO ₂ dynamics	Mark
	Losses of CO ₂ from microbasins	Mark
	Seasonal dynamics of water and nutrient losses from microbasins	Mark
15.	Hydrophobicity effect on water percolation and leaching	Mark
16.	Using remote sensing data to distinguish water deficiencies and water excess in Rohden forest + measurement of vegetation LAI	Andy

17. Biomass or forest volume and/or forest type predictions from	Carlos/Susan/
remote sensing data of LANDSAT	Andy
18. Nutrients in the subsoil in relation to soil type and landscape	Luis Carlos
position	
19. Impact of logging on accumulation of nitrate in subsoil	Stefan
20. Stock and production of gross litter in chronosequence of logging	Daniela
(92/93, 96/97, 02)	

Field work plan for 2004-2005:

2004	Activities	Members
August	Biomass/Regeneration (through Sep.)	Nara/Maria José/Carlos
	Biomass/TDR/Nitrate (through Sep.)	Ted
	TDR (each 7 days, through Dec.)	Field workers
	DOC/CO_2 (each 2 days)	Mara
	Microbasins/Nutrients/C (each 7-10 days)	Field workers
October	Visit to Cornell (through Dec.)	Carlos/Eduardo
November	Gross litter	Daniela
	DOC/CO ₂	Mark
2005		
January	Biomass/TDR/Nitrate	Ted
March	Gross litter	Daniela

Issues to discuss:

- 1. Contact with other groups
 - a. Ted, Stefan, Maria José with Euler
 - b. Mara with Sonya
- 2. Data management
 - a. LBA officials (Mata Data/Beija-flor)
 - i. Any data created have to be registered and uploaded in Beija-flor.
 - ii. Contact and send data (even preliminary) to Shinjiro
 - iii. Cornell students are responsible for compiling their own data.
 - iv. João Paulo coordinator of data from Dr. Couto's students
 - v. Carlos coordinator of data from Dr. Passos's students
 - b. Cornell/UFMT website
 - i. Upload photos, data, posters, abstracts, etc.
 - ii. Setup password access to preliminary data for and only among ND-11 members
- 3. Publication deadline
 - a. First manuscript by November 30, 2004
- 4. NASA/LBA permission for field work
 - a. Expires on December 17, 2004
 - b. Pursue Scientific Expedition License from CNPq

- 5. UFMT subcontract
 - a. Effective on June 1, 2004 through September 28, 2005
 - b. UFMT invoices Cornell on a quarterly basis
 - c. Dr. Passos is responsible for collecting receipts and submitting invoices to Cornell.
 - d. With invoice UFMT reports activity summary to Cornell.
 - e. UFMT financially coordinates with UNISELVA FOUNDATION.
- 6. Future lab analyses (carbon and nutrients)
 - a. [Luiz Carlos] Sulfur digestion, 50 samples
 - b. [Luiz Carlos] Fluorescent total amount X-ray, 50 samples
 - c. [Léo] Soils in transect, <2500 samples but possibly ~200
 - d. [João Paulo] Microbasins 20-40cm, 185 samples
 - e. [Silvana] C and nutrients in plants, <200 samples
 - f. [Evandro] C, DOC and nutrients, 600 samples
 - g. [Daniela] Soil macronutrients, 192 samples
 - h. [Daniela] Litter, 190 samples
 - i. [Ted] Soil nitrate, 200 samples
 - j. [Ted] Soil nutrients, pH, 400 samples
 - k. [Maria José] Soil analyses, 100-200 samples
 - l. [Mara] DOC, 40 samples
 - m. [Stefan] Color, pH, C, N, Ca, Mg, K, texture, 150 samples
 - n. [Mark] Water DOC, 100 samples/month
 - o. [Mark] Water nutrients, 50 samples/month
 - p. [Mark] Soil TOC, texture, 100 samples
- 7. Needs in lab
 - a. Motor of shaker for texture analysis
 - b. Minolta colorimeter lens