

# JAMES RENNIE BEQUEST

## REPORT ON EXPEDITION/PROJECT/CONFERENCE

**Celia Ruiz de Ona**

**Expedition/Project/Conference Title:** FRAGMENT PROJECT IN COSTA RICA: Developing methods and models for assessing the impacts of trees on farm productivity and regional biodiversity in fragmented landscapes.

**Travel Dates:** summer 2002 .....

**Location:** Canas de Guanacaste (Costa Rica).....

**Group Member(s):** Staff from CATIE (Centre for Research and Education on Tropical Agriculture), Staff from University of Yucatan (Mexico) and two locals from Canas.....

**Aims:** inventory of trees on farms of the area.....

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### OUTCOME (not less than 300 words):-

The **FRAGMENT** project is designed to assess the functional roles of trees in sustaining farm productivity and conserving regional biodiversity as a main objective. Funded by the European Union and co-ordinated and implemented by The Centre for Tropical Agriculture Research and Education (CATIE), the final objective of **FRAGMENT** is to increase the degree of sustainable management through the development of innovative decision support tools.

I was involved in the first gathering of data as part of a team of one technician of CATIE, a PhD researcher from Yucatan University and two locals from the town of Cañas. Occasionally, we obtained support from a research assistant of CATIE. Together we carried out an exhaustive tree inventory of 20 farms, during seven consecutive weeks.

The project has a double focus on farming productivity and on biodiversity conservation. As a future ecologist, I was more inclined to focus on the biodiversity aspect of the project, although recognising the necessity of maintaining farming productivity.

The role of isolated trees in conserving biodiversity has been highlighted in several ecological studies (Harvey *et al.* 2000). However, there are few systematic surveys of isolated trees in pastures (Harvey and Haber, 1999).

In that sense, the spatial and temporal scale in which this survey has been done represents a significant advance in the research of silvicultural systems.

The main strength of **FRAGMENT** project, from my point of view, is the effort put in developing useful decision tools destined not only to the research community, but also to the farmers involved in the study and to the NGOs and community development projects. The data collected in this survey will conform the baseline of a modelling programme and of a GIS system.

The experience of working as a part of a team in a long term and big scale project has provided me with an invaluable insight of what is a research project, how it is designed and organised, what are the difficulties in implementing it, and how the different views of a large team of technicians and students from a range of disciplines must be co-ordinated and conciliated.

Finally and more importantly, this experience has opened further opportunities for Edinburgh U. students who wish to join the **FRAGMENT** project as part of work experience. Furthermore, it is opened to students who want to develop dissertation projects (see contacts in appendices).