#### ACTIVITY PROPOSAL TO THE INTERNATIONAL TROPICAL TIMBER ORGANISATION (ITTO) Endorsed by the Government of BRAZIL

### TITLE

#### Big-leaf mahogany (*Swietenia macrophylla*) in the Brazilian Amazon: long-term studies of population dynamics and regeneration ecology towards sustainable forest management

#### SUMMARY

This Activity will contribute directly to the Joint ITTO-CITES Timber Program (approved under ITTO's 2006-2007 Work Program (Latin America region)), specifically all activities under Outputs 2.2 (improved management) and 2.3 (promoting non-detrimental utilization), by extending into 2014 the longest-running research program dedicated to big-leaf mahogany currently underway in South America. Transforming current logging practices in Amazonia into sustainable management systems requires comprehensive scientific understanding of how mahogany life history attributes interact with ecosystem processes to facilitate growth and recruitment in natural forests. This Activity seeks 1) to establish a biological foundation for sustainable forest management systems for bigleaf mahogany across southern Amazonia (Brazil, Bolivia, Peru) based on long-term studies of growth, reproduction, and regeneration by natural populations in primary and logged forests; and 2) to communicate lessons learned to private industry and to government policy and regulatory institutions.

Activities and specific outputs will include: recensus during the 2012–2013 dry seasons of two natural mahogany populations under study since 1995 in southeast Amazonia; a new field research initiative examining mahogany tree ages using dendrochronology (confirmation and analysis of annual ring formation); publication of scientific and technical syntheses of observational and experimental field data addressing both basic (demographic) and applied (silvicultural) management issues; technical extension to the private sector forest products industry and forest management regulatory agencies in South and Central America through *i*) completion of the web-based information resource <a href="http://www.swietking.org/">http://www.swietking.org/</a>, and *ii*) a training workshop on the Big-Leaf Mahogany Growth & Yield Model (see <a href="http://www.swietking.org/model.html">http://www.swietking.org/</a>, and *ii*) a training workshop on the Big-Leaf Mahogany Growth & Yield Model (see <a href="http://www.swietking.org/model.html">http://www.swietking.org/</a>, and *ii*) a training workshop on the Big-Leaf Mahogany Growth & Yield Model (see <a href="http://www.swietking.org/model.html">http://www.swietking.org/</a>, and *ii*) a training workshop on the Big-Leaf Mahogany Growth & Yield Model (see <a href="http://www.swietking.org/model.html">http://www.swietking.org/model.html</a>), using a Spanish-language Model interface and User Manual; and, continued protection and conservation of extremely valuable yet vulnerable natural mahogany populations in remote Amazonian regions through negotiation of terms for their long-term conservation and sustainable use.

# ADMINISTRATION / LOCAL FACILITATING AGENCY

Instituto Floresta Tropical, Caixa Postal 13077, Belém-PA, Brazil 66040-970, Marco Lentini, Director

Co-Investigators: Dr. James Grogan (Mount Holyoke College, MA, USA) & Dr. Mark Schulze (Oregon State University, OR, USA)

Dr. Grogan will be responsible for all administrative matters for this activity, including reporting on Activity finances.

## ENDORSING AGENCY

Serviço Florestal Brasileiro (SFB), Ministério do Meio Ambiente, Avenida L4 Norte, SCEN, Trecho 2, Bloco H, 70818-900, Brasília–DF, Brazil

**DURATION** (months)

22 months

PROPOSED START DATE

01 September 2012

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