

FOREST NUTRITION COOPERATIVE

North Carolina State University • Virginia Polytechnic Institute and State University • Universidad de Concepción

Brazil Benchmark Trip to Pine and Eucalyptus Plantations

Pine Week – May 16th – May 22nd
Eucalyptus Week – May 23nd – May 29th

Background & Justification: Brazil has approximately 1.83 Million ha (4.52 Million acres) of **Pine** and 3.70 Million ha of **Eucalyptus** (9.14 Million acres). These exotic forests are responsible to keep Brazil as one of the leaders in pulp, paper and panels production in the world while occupying less than 0.7% of Brazil's landscape. Such achievement is a consequence of almost 50 years of research and operational joint development based on cooperative programs among Brazilian companies, research institutes and the universities which increased plantations productivity and shorted the rotation. Nowadays, the average mean annual increment of Pine is 25 m³/ha/yr (350 ft³/ac/yr) and 38 m³/ha/yr (540 ft³/ac/yr) for Eucalyptus. In 2009 Brazil moved from the 6th to the 4th place in the ranking of pulp world producers with 13 Million tons, and is planting yearly between 250 and 300 thousands ha of forests (90% Eucalyptus and 10% Pines). Traditional and new forest areas are under intense development, including the establishment of new modalities of planted forest investments, besides the vertical forest-industry system, like TIMOs, Energy dependent companies, Forest associations and Farmers producers. An edited report of the Brazilian Pulp-Paper Association (<http://www.bracelpa.org.br/eng/index.html>) is attached (**Brazil-Info-ABRAF-2007.pdf** - the complete document can be downloaded from the site). We also recommended the Association Video at <http://www.youtube.com/watch?v=ofTqeBIKHQI> . Although some FNC's members have a long link with Brazil others are just initiating or planning to move in this direction. That is why we believe that this Benchmark will be valuable for the FNC Members.

Opportunity: This will be a unique opportunity to visit, learn, discuss and interact with leader Companies and Universities of the Brazilian forest sector regarding **basic-applied research** (from tree-breeding to all silvicultural practices) and **silviculture-harvesting operational activities**. As pine plantations are concentrated in Southern Brazil and Eucalyptus in Southeastern and Northeastern Brazil, the trip will focus on Pine (mostly Loblolly) during the first week, and Eucalyptus in the second week. The IPEF Institute in Brazil (www.ipef.br) is helping coordinate the visit, and all the Brazilian Companies had already been contacted and welcome the tour in May 2010.

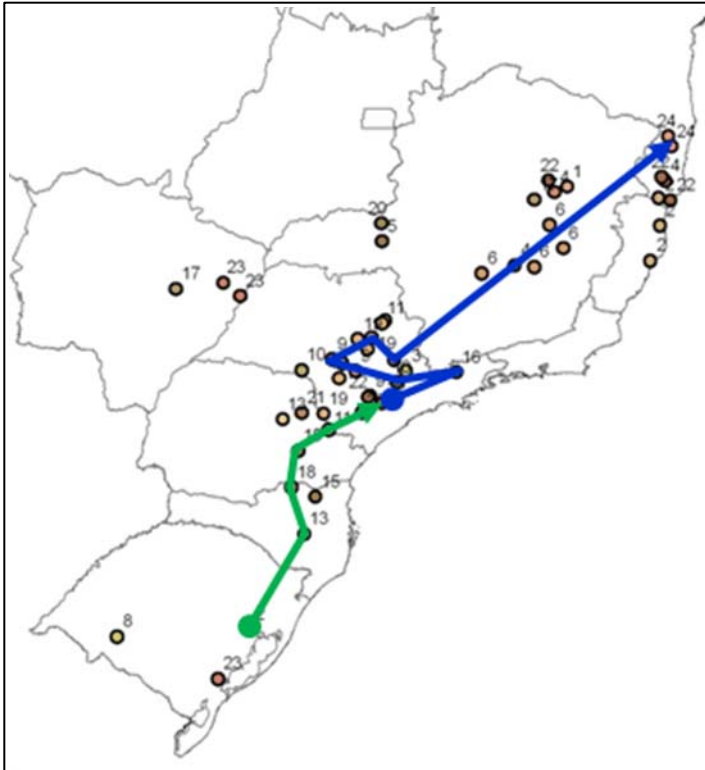
Participants: As discussed and approved in the FNC Annual Meeting, the FNC Brazil Benchmark trip is open for all FNC members and will welcome participants from others Forest Cooperatives and Universities from the Southeast US.

Pre-registration: A pre-registration (*January 25th to February 5th*) is needed to better plan the logistics for the trips and determine the **Real Final Costs**. Only enrolled people will receive information about the **Final Registration**. The final registration will occur from February 12-26, 2010. The pre-registration link is: <http://spreadsheets.google.com/viewform?formkey=dGNRb1NzcnFmZFFjTGsyQ0g2N0FvY2c6MA>

Brazilian Visa: We inform that Brazil requires a Visa for Americans to visit the country. Please visit the link http://www.brasilemb.org/index.php?option=com_content&task=view&id=42&Itemid=155 .

The Two Trips - Pine and Eucalyptus Weeks

Pine Week – May 16th – May 22nd
Eucalyptus Week – May 23rd – May 29th



General Information

The map shows the itinerary we will follow for the Pine Week (Green Line) and the Eucalyptus Week (Blue Line). The dots in the map represent forest plantation clusters.

For both trips the US-Brazil-US airfare ticket IS NOT included in the estimated cost once it is much cheaper to buy the tickets in US. Each participant will have to buy its own US-Brazil roundtrip ticket.

The Pine Trip will start in Porto Alegre (capital of Rio Grande do Sul State) and will finish in Sao Paulo city. The whole trip will be in executive buses. You should be in Brazil on May 16th.

The Eucalyptus Trip will start and finish in Sao Paulo (capital of Sao Paulo State), will also use executive buses, but it will have a domestic flight (Campinas – Porto Seguro – Sao Paulo) which is included in the estimated cost. You should be in Brazil on May 23rd.

Pine Week Schedule– Starts Sunday 16th (arrival in Brazil) and ends Saturday 22nd (leaving)

City (State)	Company (Main Species)	Topics to Cover
Porto Alegre (Rio Grande do Sul)	Rio Grandense Mininco (Subtropical - <i>Eucalyptus</i>)	Breeding, Nursery, Site Prep, Planting, Fertilization, Weeds, Harvesting
Lages (Santa Catarina)	Klabin (Loblolly Pine)	Site Prep, Silviculture, Harvesting
Canoinhas (Santa Catarina)	Rigesa (MWV) (Loblolly Pine)	Breeding, Site Prep, Planting, Weeds, Thinning
Telemaco Borba (Parana)	Klabin (Loblolly Pine, Eucalyptus)	Breeding, Nursery, Ecophysiology, Silviculture, Eucalyptus Sawtimber
Jaguariaiva (Parana)	Valor Florestal (Loblolly and Tropical Pines)	Breeding, Site Prep, Weeds, Thinning, Harvesting

Eucalyptus Week Schedule– Starts Sunday 23rd (arrival in Brazil) and ends Saturday 29th (leaving)

City (State)	Company (Main Species)	Topics to Cover
Jacarei (Sao Paulo)	Fibria (Eucalyptus grandis)	Breeding, Site Prep, Fertilization, Weeds, Harvesting – Clifty Areas
Piracicaba (Sao Paulo)	IPEF and IF Institutes University of Sao Paulo (Eucalyptus spp)	Cooperative, Education, Economics, Seeds, Eucalyptus Museum
Botucatu (Sao Paulo)	University of Sao Paulo Duratex (Eucalyptus spp)	Loblolly and Tropical Pines, Eddy Flux Tower, Coppice Management
Mogi Guacu (Sao Paulo)	International Paper Brasil (E.grandis x urophylla hybrids)	Breeding, Site Prep, Fertilization, Silviculture, Twin-Plots, Modeling
Porto Seguro (Bahia)	Veracel = Fibria + Stora Enso (E.urophylla hybrids)	Breeding, Ecophysiology, Site Prep, Fertilization, Weeds, Harvesting, Environment

Pre-Estimated Costs per Week per participant: Values are in US\$ and do not include the US-Brazil airfare. The final values can have a +/- 15% variation pending on the number of participants.

ITEM	Description	Single Room	Double Room
Pine Week			
Transportation	Executive Bus	875	875
Hotel	Hotels	620	460
Others	Insurance	265	265
TOTAL PINE		US\$ 1760	US\$ 1300
Eucalyptus Week			
Domestic Flight	Sao Paulo / Bahia	760	760
Transportation	Executive Bus	320	320
Hotel	Hotels	920	620
Others	Insurance	300	300
TOTAL Eucalyptus		US\$ 2300	US\$ 2000
TOTAL Both		US\$ 3700	US\$ 3000

Pre-registration: from January 25th to February 5th. Only enrolled people will receive information about the **Final Registration** which will occur from February 12-26, 2010. **Payment will be needed by March 19th.** The pre-registration link is:

<http://spreadsheets.google.com/viewform?formkey=dGNRb1NzcnFmZFFjTGsyQ0g2N0FvY2c6MA>

Any further question or information, please, send an e-mail to Stape at jlstape@ncsu.edu

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