



Wood Pellets for Pullets

Heating Broiler Houses with Wood Pellets in
Georgia

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Georgia Forestry Commission
PFI Conference
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Project Partners

FRAM Renewable Fuels
University of Georgia
Georgia Poultry Federation
Georgia Forestry Commission



Project Objectives

- To develop a local market for compressed wood pellets.
- To provide poultry industry with a cheaper method of heat.
- To determine what modifications are required to the wood pellet furnace system to maximize efficiency and minimize labor.
- To determine possible broiler performance benefits that may be associated with a wood pellet heating system.



Chickens

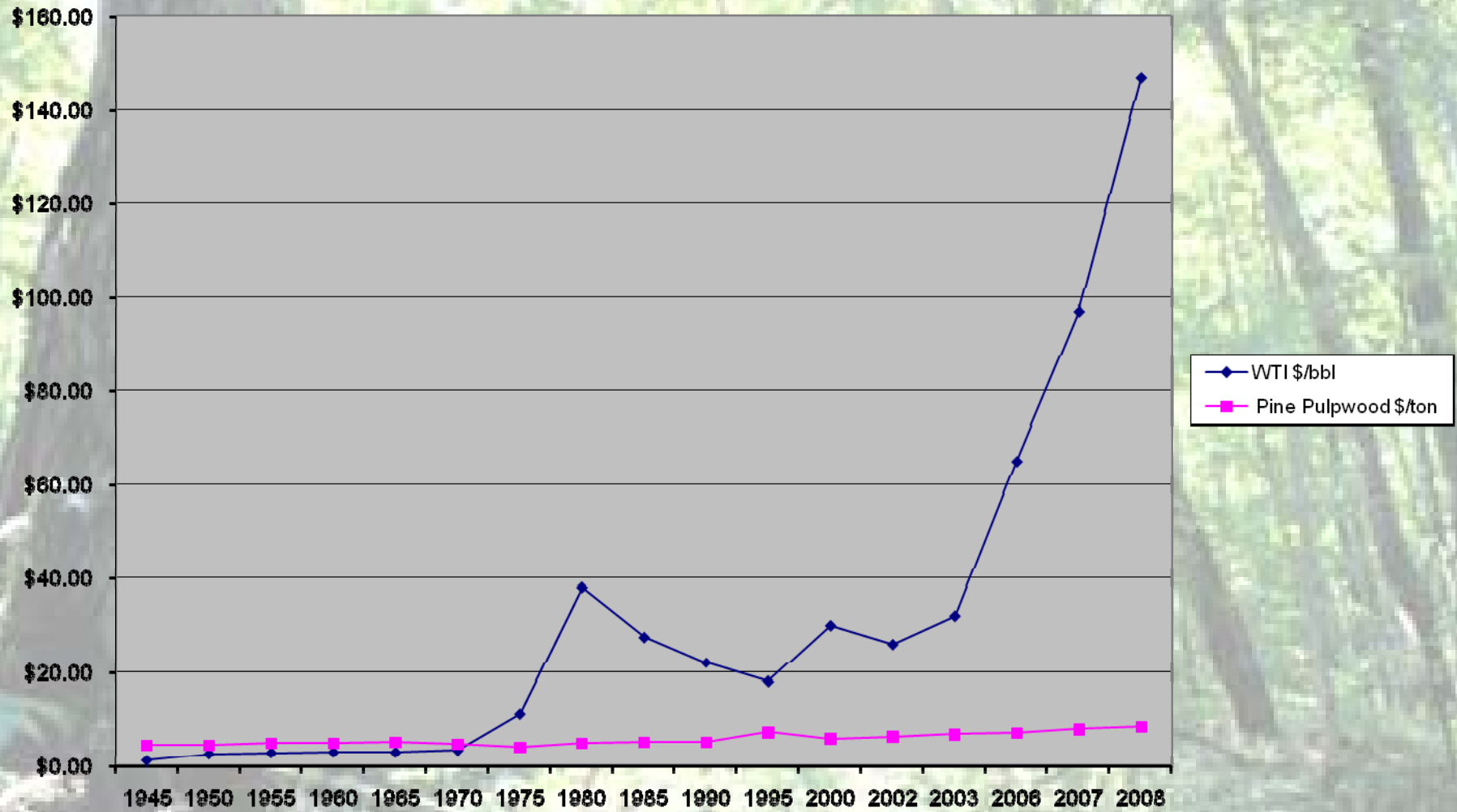
Big Business in Georgia

- **13,000 Commercial Poultry Houses**
- **Most are 40' X 500' or 20,000 sq. feet**
- **Lined up end to end they reach 1,231 miles – the distance from Milwaukee to Orlando.**

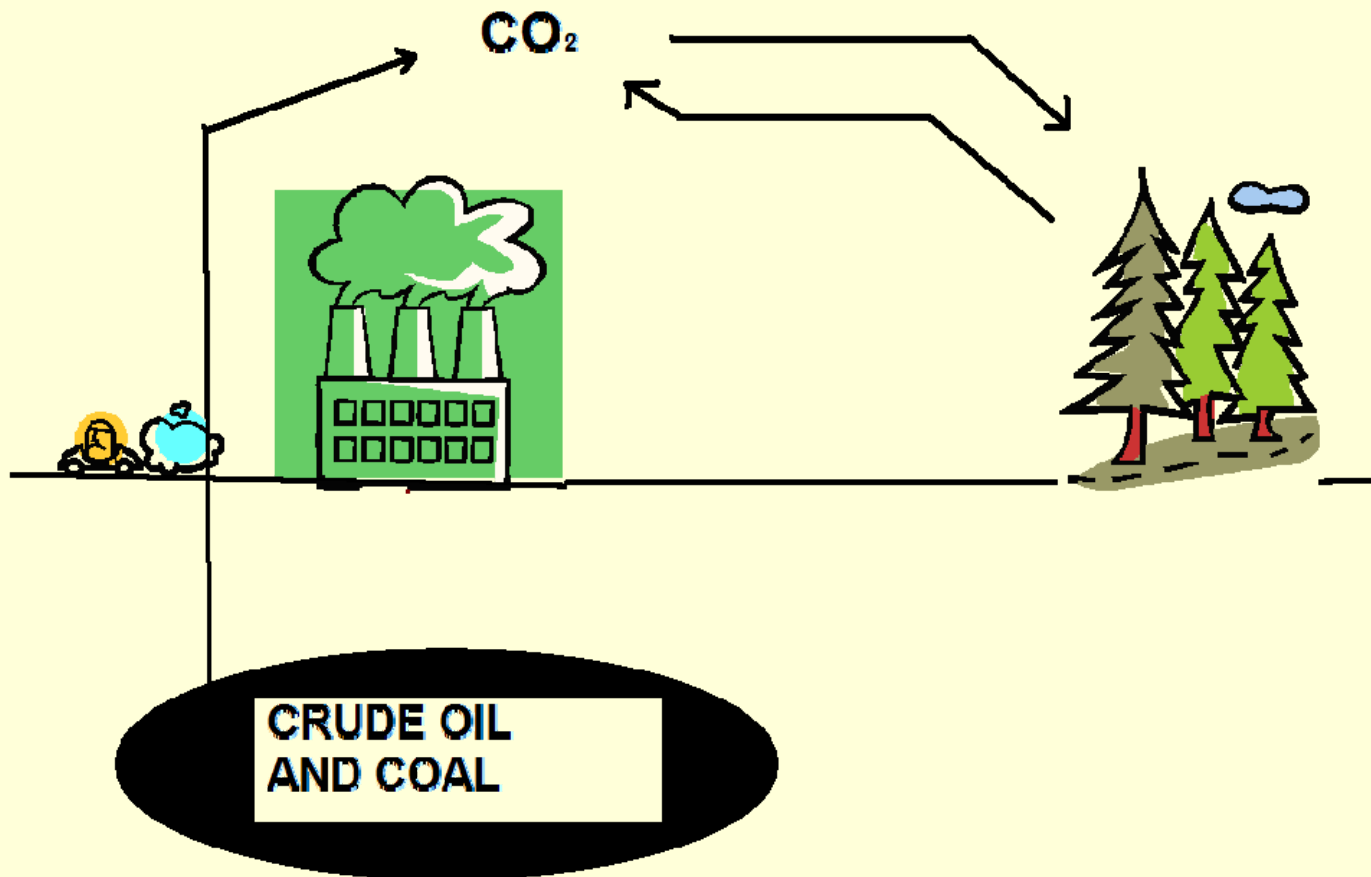
Chickens – Big Business...

- **On an average day, Georgia produces 24.6 million pounds of chicken and 14 million eggs.**
- **Propane is single biggest cost to grower.**
- **Typical house uses 5,000 gals per year**

SE Ave Pulpwood Stumpage vs. W. Texas Intermediate Crude Oil



Unbalanced Carbon Cycle



A photograph of a forest with many tall, thin trees and a large tree trunk in the foreground. The text is overlaid on the image.

Our Challenge

**More Energy, Less Carbon
Dioxide**





Wood Fuel Pellets

provided by:



RENEWABLE FUELS

www.framfuels.com

912-233-8805





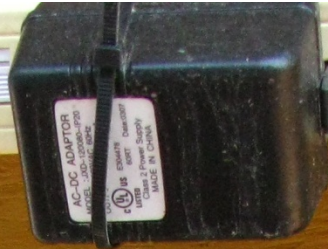






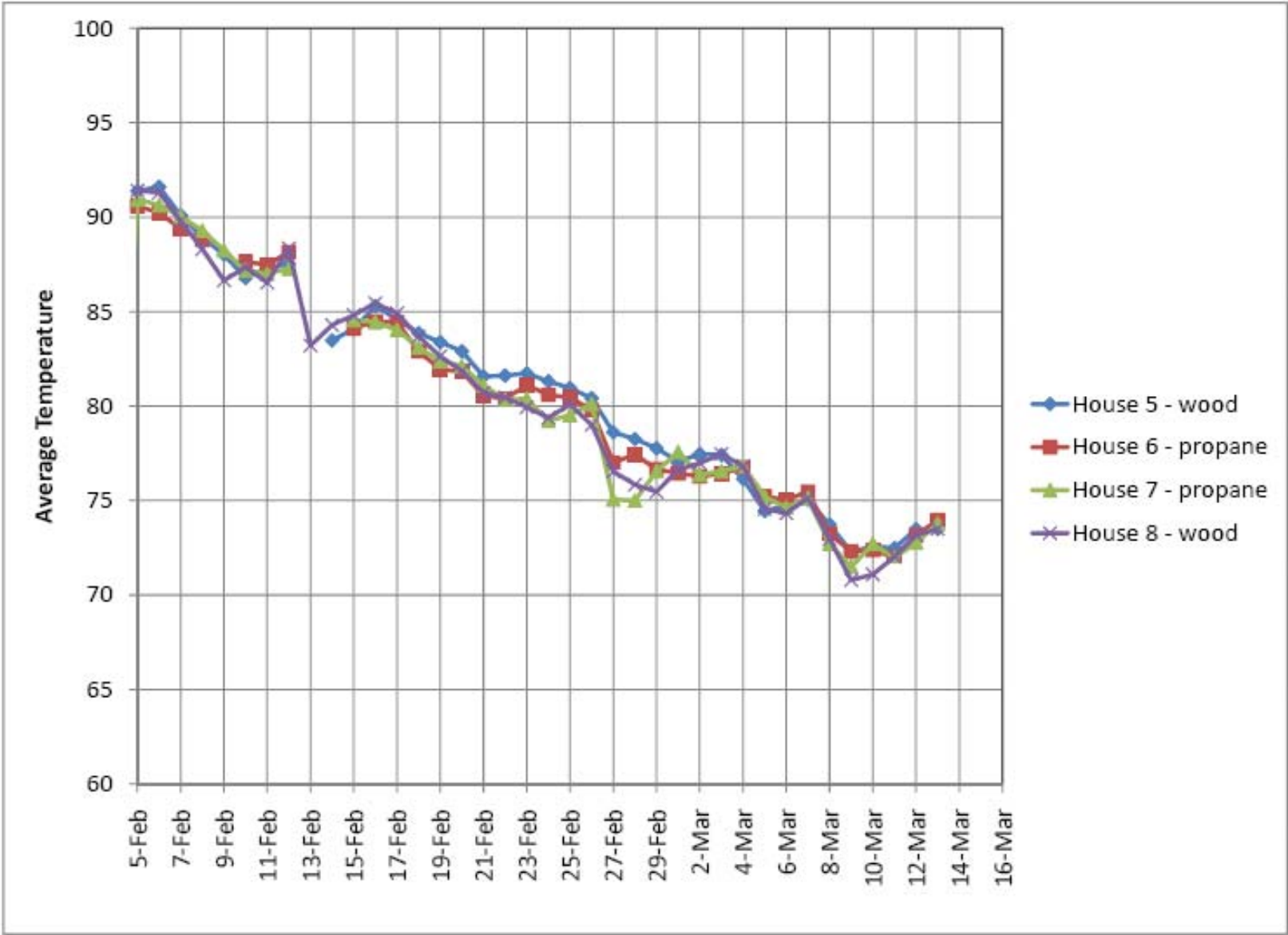


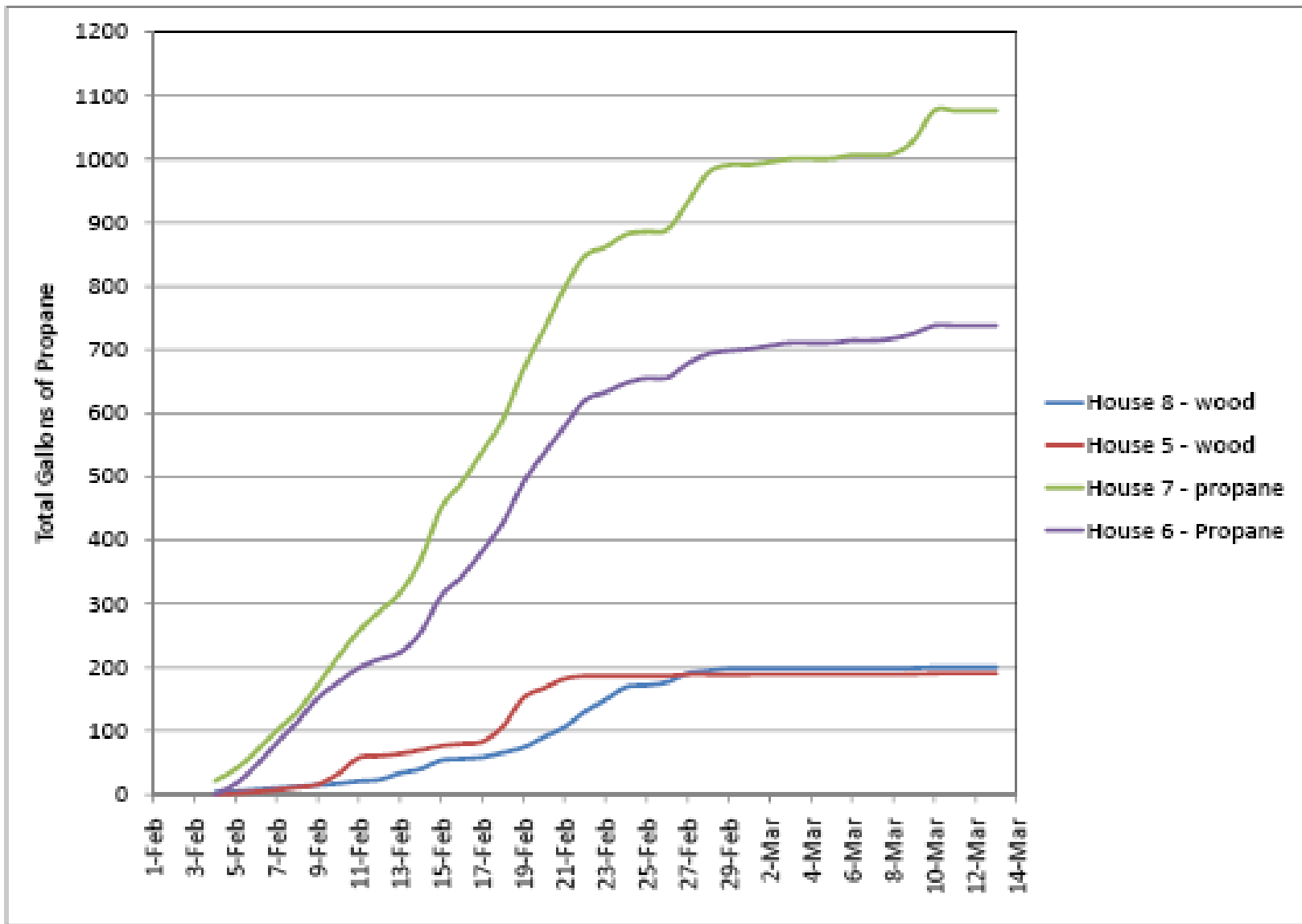




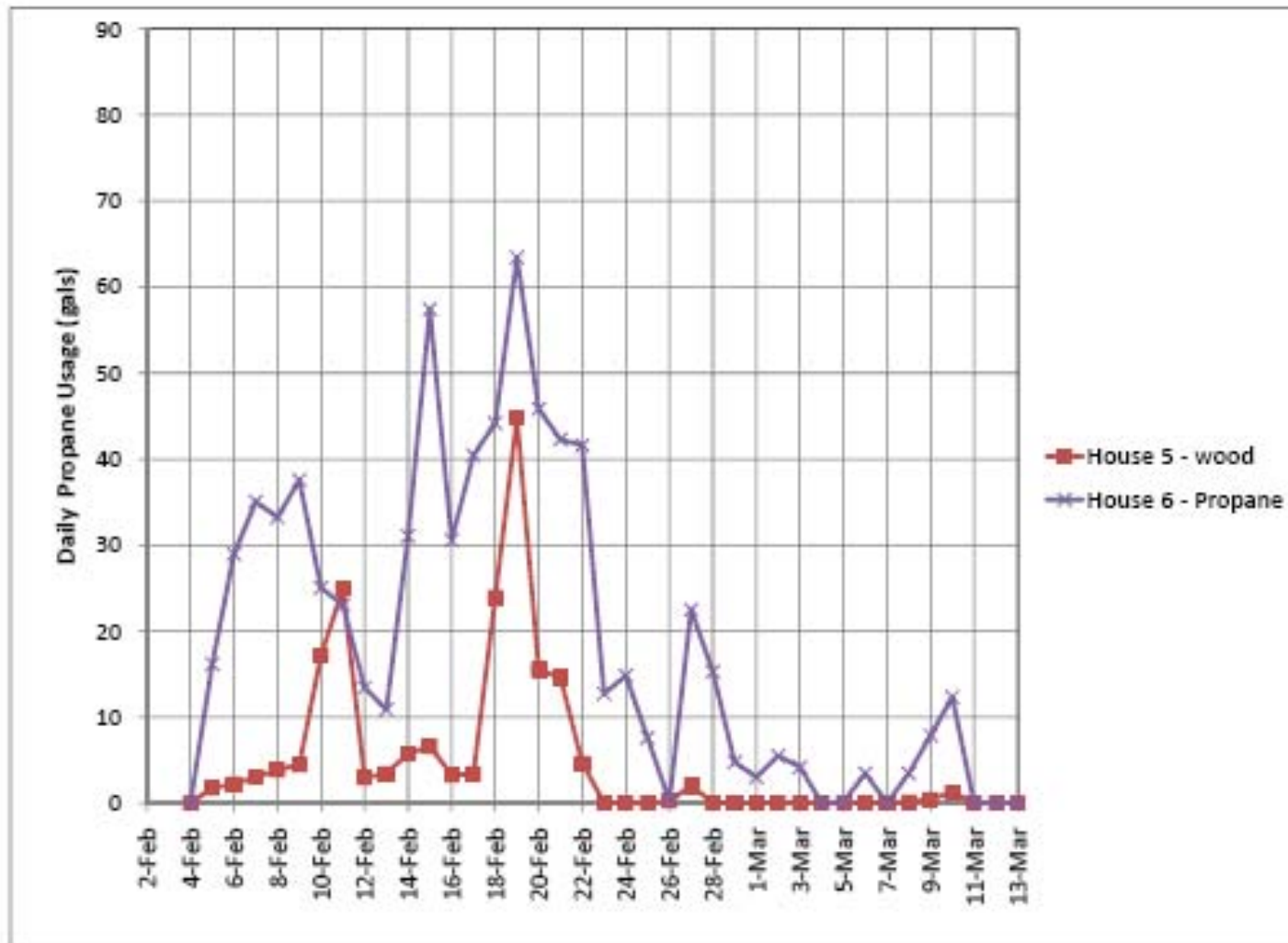


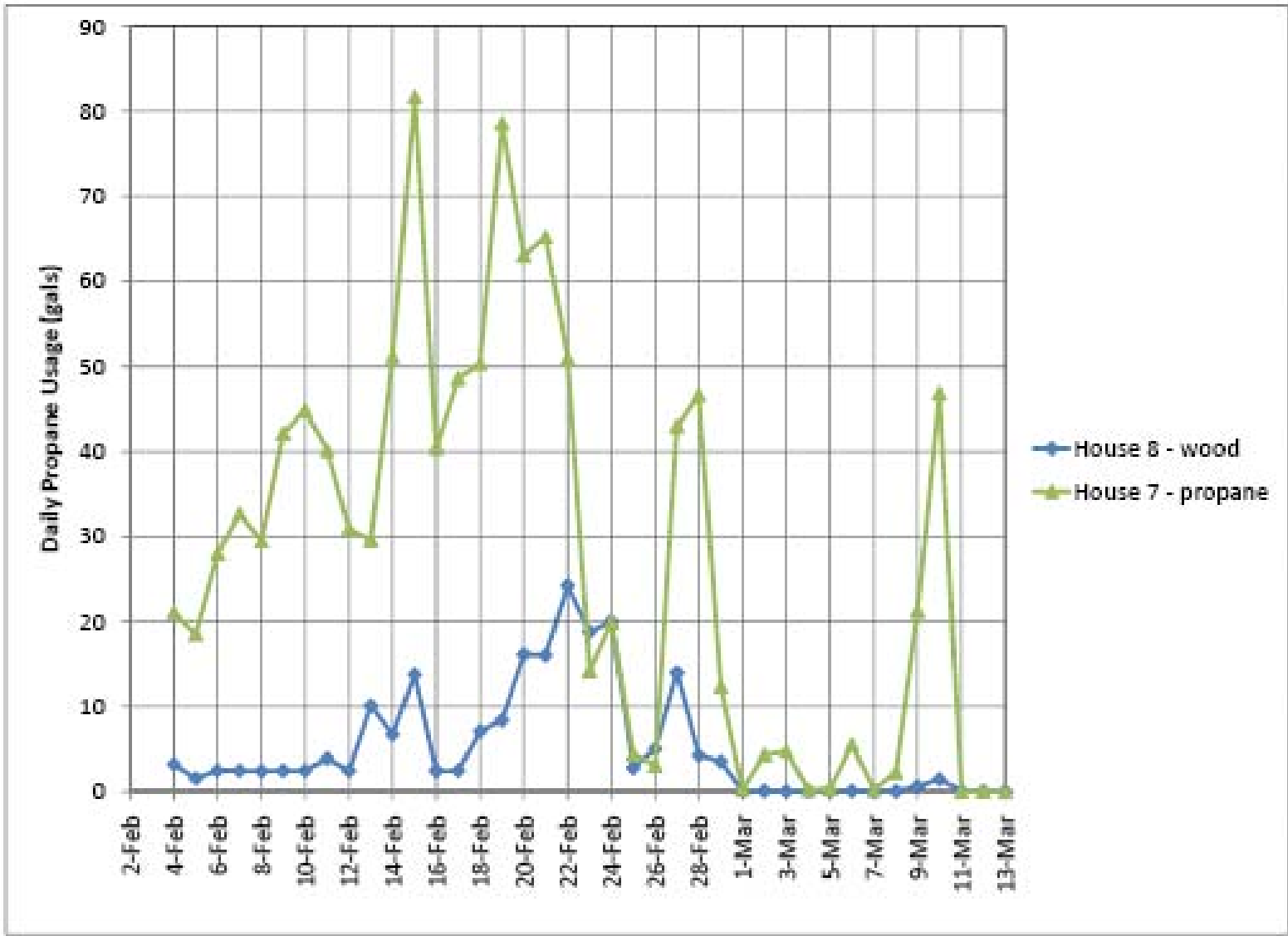


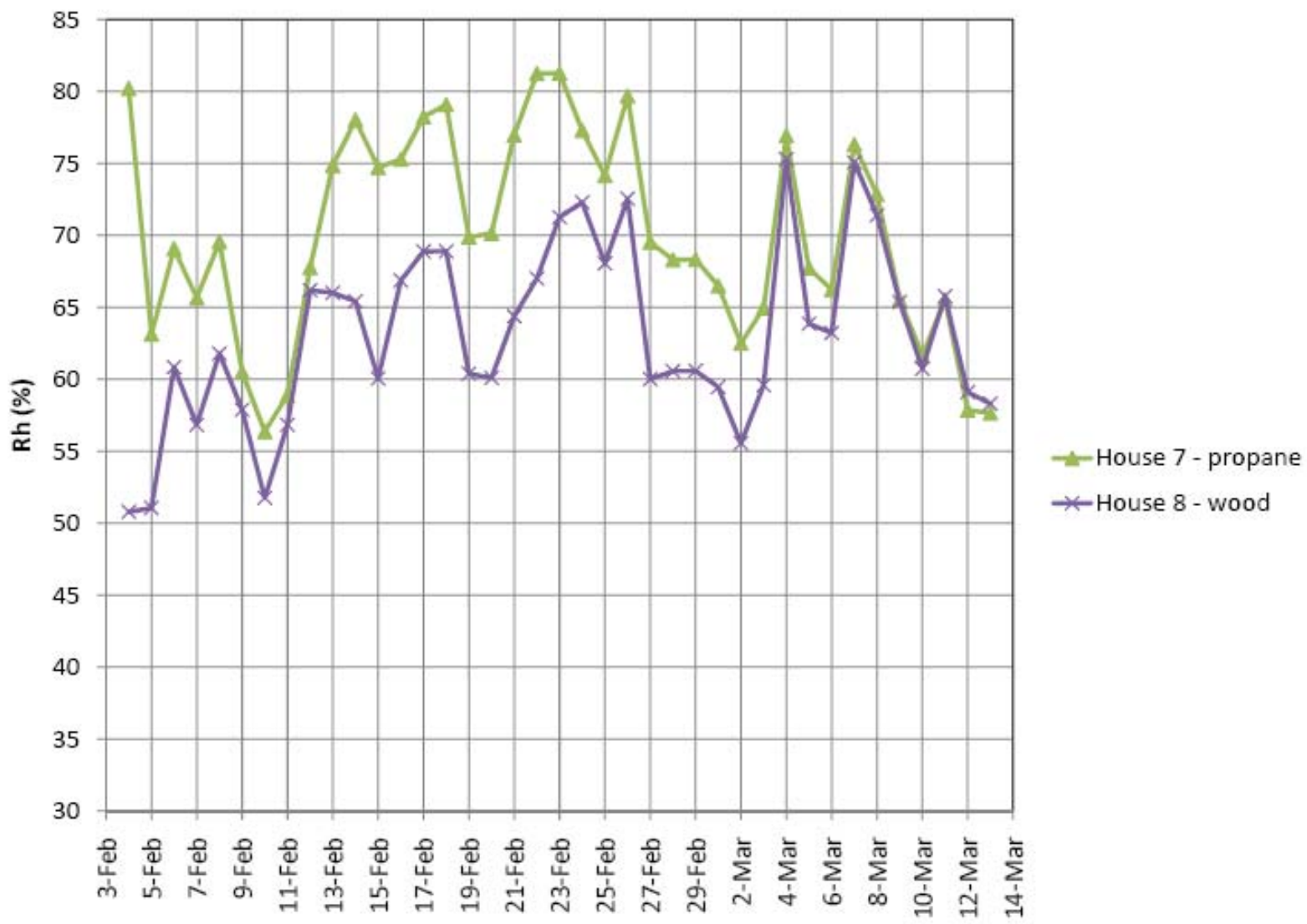


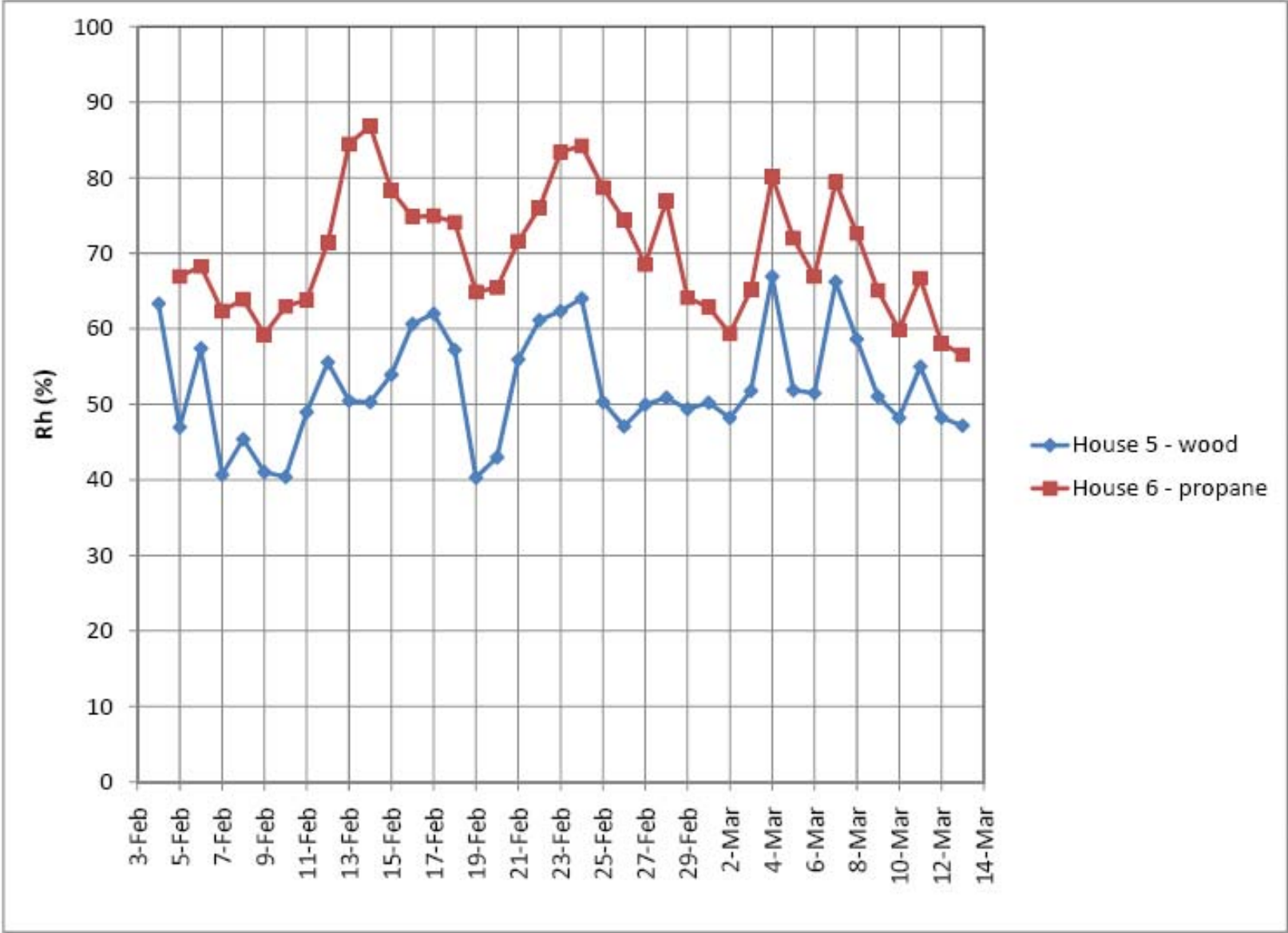


Daily Propane Use



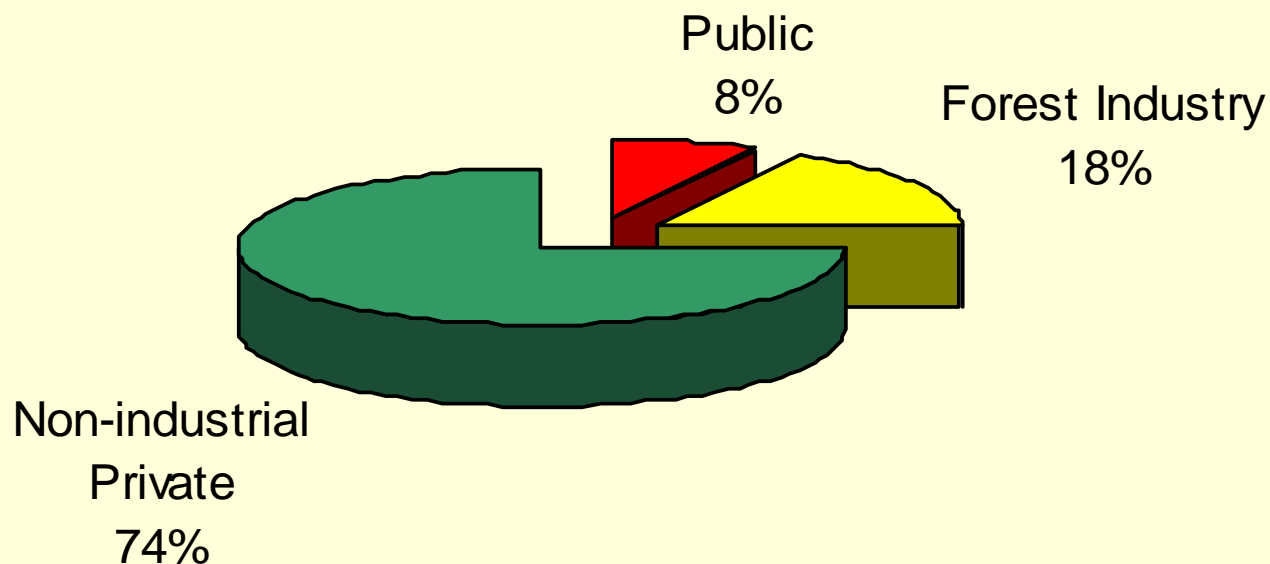






Forestland Ownership in Georgia

#1 in private commercial forest land area

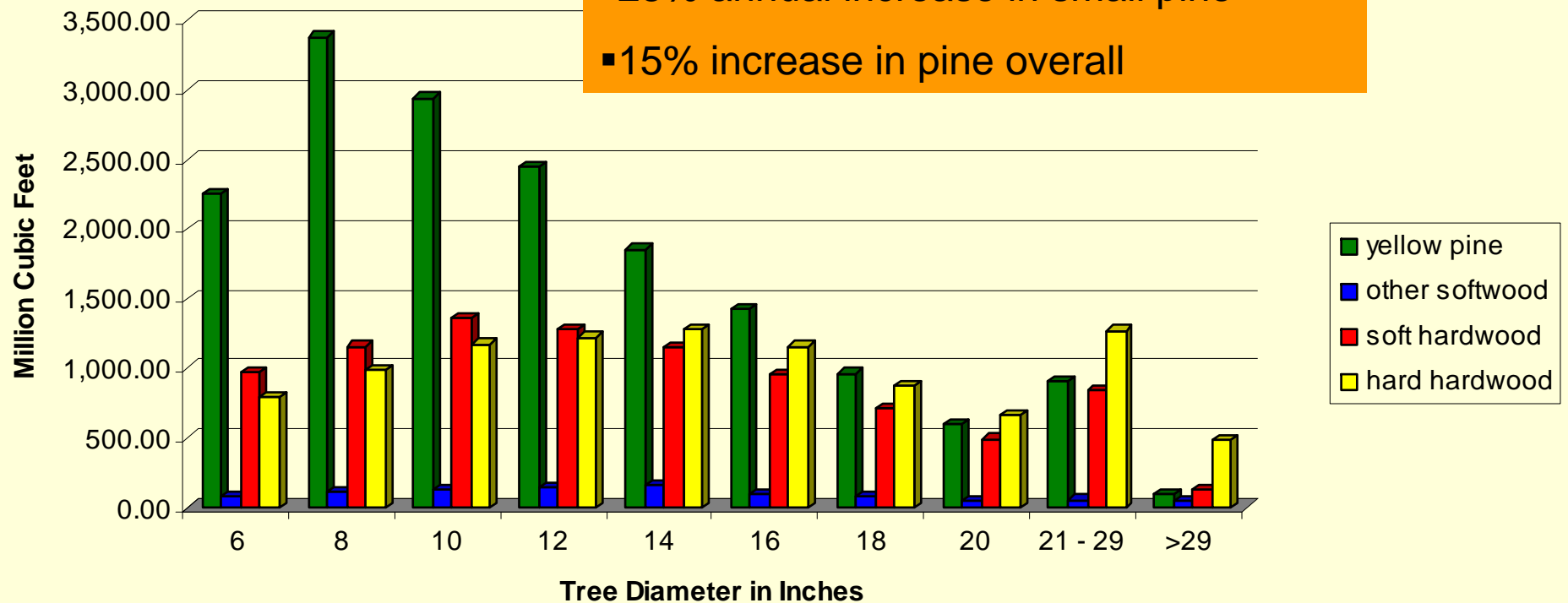


Source: Forest Inventory and Analysis data, USFS Southern Research Station



Georgia's Forest is Growing

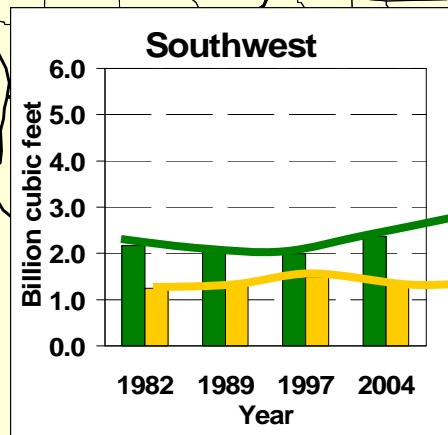
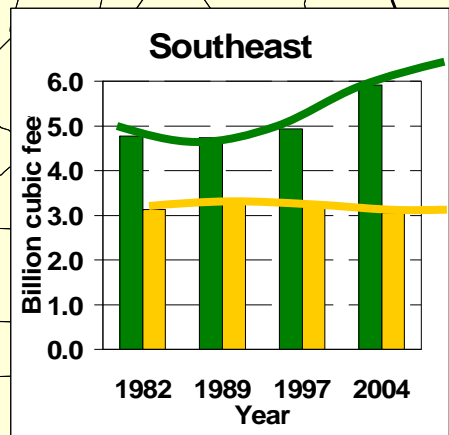
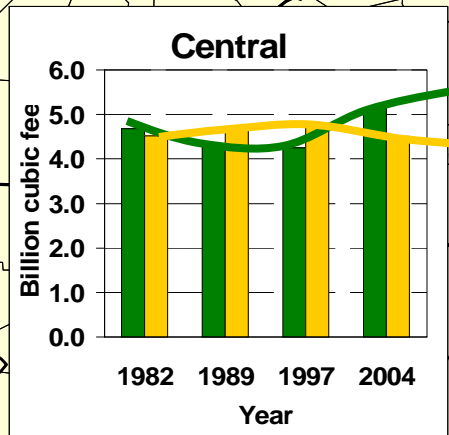
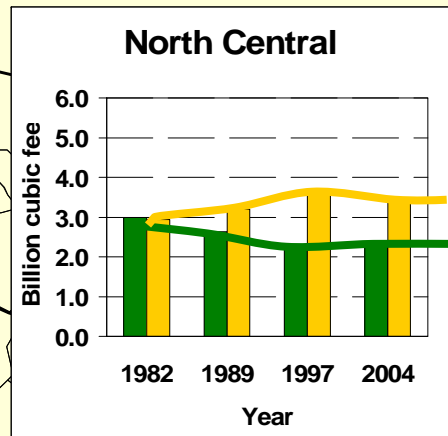
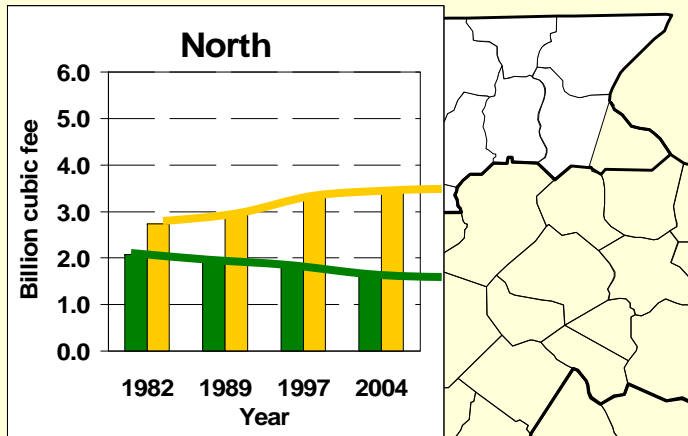
1997 - 2004:

- 23% annual increase in small pine
- 15% increase in pine overall



Source: Forest Inventory and Analysis data, USFS Southern Research Station

 Softwood
 Hardwood





Opportunities and Challenges

- Replace propane with locally grown carbon friendly fuel.
- Improve rural economic development
- Offer timber growers an additional product from the forest
- Competition from cheaper local wood chips
- Capital costs to farm are tough to swallow
- Slag accumulation must be eliminated
- Heat delivery to remote ends of house