

**SAF Spring Conference, 8-10 May 2007**  
***Emerging Technologies in Woody Biomass Use***  
***New Perceptions of a Familiar Resource***  
**Bay de Noc Community College, Escanaba, Michigan**

**Field Tour Site Descriptions**

**WEDNESDAY 9 May 2007**



8-year old poplar at UPTIC    3--year old willow in NY

Energy plantations (poplar, willow, switchgrass);  
*MSU U.P. Tree Improvement Center*

Energy plantations on abandoned crop land could produce about 6 million dry tons a year in Michigan. Yields in northern Michigan have been running about 3 – 4 dry tons per acre each year. That's the equivalent of about 3 cords per acre per year. Poplar hybrids, native aspen, and willows seem to have the best potential for this area.



Mechanical Slash Bundling; *Nelson Forest Products*

Economically gathering and hauling logging residue and other unmerchantable materials will be a challenge. Various methods for doing this will be demonstrated in a young red pine plantation.



NewPage Corporation; *Escanaba, wood energy conversion & waste stream energy product possibilities*

This major U.S. pulp & paper mill produces coated fine papers. It also produces process heat and electricity from mill wastes and fuel chips. The Escanaba, Norway, and Ontanogan paper mills produce 40% of all the wood generated electricity in Michigan.



Ag Solution's Biodiesel Plant; *Gladstone, Dick Vande Vusse*

This plant is Michigan's first biodiesel facility. It has the capacity to produce up to 10 million gallons of biodiesel annually. It uses soybean oil as a feedstock.

## THURSDAY 10 May 2007



Messersmith Industrial Biomass Combustion Systems; *Bark River, Larry Klope*

These units burn wood chips, sawdust, and other clean biomass very efficiently. Units can be sized for building demands for 500,000 to 20 million BTUs. Messersmith systems include storage, walking floors, conveyance, metered augers, boiler, and are computer-controlled. These systems have low emissions.



Vulcan Wood Products; *pellet mill in Vulcan*

Wood pellets have gained in popularity world-wide in the last few years. They are burned in high-efficiency stoves and furnaces that ignite the fires only when needed. Pellets can be made from a variety of biomass feedstocks but here they are using sawmill residues.



Louisiana-Pacific OSB Mill; *Sagola, Jon Lamy*

Here we will discuss the energy management system in place at the mill. If we are lucky we might even get a tour of the production line.



North Dickinson Schools; *Felch, long-time woody chip burning*

This school has been burning wood for heat for many years. We'll hear about the savings they realize and the logistics of operating a heating plant like this in a municipal building.