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# Short-Rotation Woody Crops Operations Working Group NEWSLETTER



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# Steering Committee Meeting Minneapolis, August 21st Forest Service Headquarters

The Steering Committee meeting will meet from 10:00 to approximately 3:00 on August the 21st.

Tentative agenda items include:

- Evaluation of services to and needs of members
- Recruitment of new members
- Membership fee payments
- Operations and administration
- Planning for the 2002 conference
- Activities between conferences
- Development of budget(s) spending and collecting
- Reconstitution (completion) of steering committee
- How we might benefit from the "new" interest in bioenergy

Please email Bob Perlack with any additions to the agenda (perlackrd@ornl.gov).

### **Biopower Update in Minnesota**

A new field test site established in Minnesota in spring of 2000 is located near Waseca, Minnesota, within close distance of the proposed Whole-Tree Energy Power plant at St. Peter, Minnesota. The new field trial contains 50 new clones resulting from breeding work sponsored by DOE/ORNL in Iowa and Minnesota. These 50 clones are also replicated at four other regional test sites that were initially established in 1995. These 50 clones include advanced generation backcross pedigree selections of poplar hybrids and a few pure cottonwoods (Populus deltoides). The Waseca trial, contains, in addition, the best clones resulting from the trials established in 1995 and 1997 at the other four regional clonal test sites in Wisconsin, Iowa and Minnesota. This project will aid in transferring DOE/ORNL developed woody crop technology to commercial application for biomass power if the St. Peter project obtains financing.



Clones after 1-year of growth, May 2001

In the regional trial at the Waseca site, tree survival is very high with the only mortality occurring in clones from Iowa that may not be suited for the colder Minnesota winters. The planting is on the relatively high quality agricultural soils typical of southeastern Minnesota. Tending of the site has been excellent resulting in very little weed competition, a critical factor in achieving optimal first year growth.



David Ostlie (left) – Energy Performance Systems and co-project developer of the St. Peter biopower project. Don Riemenschneider – US Forest Service and responsible for maintaining and documenting results of the regional clonal trials.

#### **New Genetic Trials in New York**

Two new genetic selection trials were established at the State University of New York (SUNY) Environmental Science and Forestry Genetics Field Station at Tully, NY. One of the SUNY trials contains 110 of the most successful poplar clones from breeding programs in Wisconsin and Iowa supported by USDA and DOE. The second field trial at Tully contains 25 of the newest willow clones produced by controlled breeding and selection by the SUNY-ESF project. A duplicate of this willow trial has also been established in Wisconsin by USDA Forest Service staff in Rhinelander. Both the willow and poplar plantings in Tully, NY are relevant to the biopower project in Dunkirk, New York, which is testing co-firing of wood residues and woody crops with coal. The genetic studies provide information to help select the most reliable and cost-effective woody crop supply systems for future utilization by the Dunkirk or other coal-fired power plants in eastern New York.

### **USDA Approves CRP Biopower Projects**

Four projects were approved to allow Conservation Reserve Program Land to be planted and harvested for producing feedstocks for Biomass Power Project. The two of interest to wood producers are in Minnesota and New York.. In Minnesota, hybrid poplar will be grown in the Minnesota River watershed. The trees will be used to produce power in a 50 MW Whole-Tree Energy power plant in St.Peter. In New York, willow and switchgrass will be grown in the central and western part of the state. The biomass will be used in coal-fired facilties. The projects are not necessarily a "done deal" since constraints included with the project approval language may prevent the projects from moving forward. Negotiation with USDA is ongoing. The original news release regarding the projects is available at:

http://www.fsa.usda.gov/pas/FullStory.asp?StoryID=137

### **Solicitation Released on Alternative Biomass Crops**

Oak Ridge National Laboratory (managed by UT-Battelle LLC) has issued the solicitation, Innovative Biopower Feedstock Production in the Southeastern United States for the Biopower Feedstock Development Program (BFDP). The Department of Energy's BFDP is requesting proposals for conducting an analysis of the feasibility and advantages of developing alternative crops as biomass resources in the Southeast. The studies will assist the Biomass Power Program in deciding the relative tradeoffs of investing in additional crop species versus focusing attention on selecting and modifying the current model species for the southeast (poplars and switchgrass). Proposals are due September 7, 2001.

For more information:

http://www.ornl.gov/procurement\_rfp/34-12580-91/.

Note: Once you reach the website, enter the user id: biores and password: br8091 to access the procurement documents.

### **University of Washington Fire**

The Bioenergy Feedstock Development Program is a member of the Poplar Molecular Genetics Cooperative (PMGC) at the University of Washington (UW) whose facilities were destroyed by fire on May 21. The fire was set in the office of UW researcher Toby Bradshaw who conducts basic research into the genetics of fast growing hybrid poplars and directs the PMGC. In June, the Earth Liberation Front took credit for the fire. It is believed that the impacts of the fire on PMGC research will be minimal. The main losses to PMGC were laboratories and equipment. Frozen plant tissue samples, plant materials in

the field, and data were not harmed. According to Dr. Bradshaw, the State legislature has appropriated \$4.1 million to rebuild the Center for Urban Horticulture over the next 3 years. Currently, Dr. Bradshaw is located in a laboratory in the Botany Department and has been loaned equipment and supplies. Although some work has been delayed because of the fire, the objectives of the PMGC will be accomplished as planned. Dr. Bradshaw is currently involved in the newly established Accelerated Domestication Project; it is believed that the fire will not affect his participation.

# Related news articles:

Seattle Post-Intelligencer include – UW research plants 'will not be deterred by the ravages of arson

http://seattlep-i.nwsource.com/local/25770\_elf02.shtml

Get UW center up and running

http://seattlep-i.nwsource.com/opinion/26136\_cuhed.shtml

Elusive radicals escalate attacks in nature's name

http://seattlep-i.nwsource.com/local/27871\_ecoterror18.shtml.

Science Magazine – Arson Strikes Research Labs and Tree Farm in Pacific Northwest http://www.sciencemag.org/cgi/content/full/292/5522/1622

St. Louis-Post Dispatch – Tree scientists from government, universities and the forestry and biotechnology industries gathered Sunday at the Millennium Hotel in St. Louis for the Society for In Vitro Biology's annual congress to discuss field trials and environmental risks from biotech trees. Please see – Scientists See Wood Supply in Genetically Engineered Trees Environmentalists Object <a href="http://www.graduatingengineer.com/news-archive/2001/06/18/SLMO/000-4733-KEYWORD.Missing.html">http://www.graduatingengineer.com/news-archive/2001/06/18/SLMO/000-4733-KEYWORD.Missing.html</a>

Finally, for those interested in the reading the press release from The Earth Liberation Front:

Earth Liberation Front Claims Responsibility for Simultaneous Actions in 2 States (UW Fire and Clatskanie, OR fire); Over an estimated \$3 million in Combined Damages

http://www.earthliberation front.com/news/2001/010601 m1.html

### **Whole-Tree Harvester**

Energy Performance Systems, Inc. was recently awarded a Small Business Innovative Research grant by DOE to continue the development of a high-productivity whole-tree harvester. The grant will be used to develop the accumulator control systems for the harvester.

### **Need Images?**

Anne Ehrenshaft (ORNL/BFDP) discovered the following item from Google's search page. It might be useful to those who may have an occasional need for a photo, picture, figure, or whatever.

From Google -

If a picture is worth 1,000 words, what about a million pictures? Or to be more precise 250 million pictures? Google Image Search (beta version) is the most comprehensive way to search for images on the Web and it's just as easy to use as Google's other Web search services. To use image search, find the image search box on Google's advanced search page or visit http://images.google.com and enter a query. Then click the "Search" button. When the results page appears, click the thumbnail to see a larger version of the image, as well as the web page on which the image is located. http://images.google.com/

In addition, images are available from the Gallery at ORNL's Bioenergy website. The Gallery is a self-service "mall" from which you can download pictures and drawings. It is organized by energy crop or research area. ORNL plans to update this gallery and add more photos soon, but you are welcome to use what's there now. http://bioenergy.ornl.gov/gallery/



# 5th International Biomass Conference of the Americas – Bioenergy and Biobased Products: Technologies, Markets, and Policies

The Rosen Centre Hotel Orlando, Florida September 17-21, 2001

A special focus of this years conference will be on the factors affecting the future of biomass, biopower, bioenergy, and biobased products, including prices of other fuels, the effects of a deregulated electricity market, the influence of green marketing, and other trends affecting agriculture, forestry, industry, and climate. The conference will feature over 30 presented paper sessions, posters, and a number of field trips. One of the five field trips will visit eucalyptus and cottonwood plantings.

Detailed information including registration and logistics can be found on the conference website:

http://www.fsec.ucf.edu/bioam/

### **Poplar-Willow Technology Network**

A national network of experts have come together to provide technical support for individuals, private companies, city, county, state, and federal agencies interested in using fast growing tree species for wastewater treatment and other similar types of tree-related environmental projects. Eventually a hardcopy manual will be developed, as well as an internet website. The website will be updated and provide direct links to identified experts. For more information, contact Jon D. Johnson, Ph.D., WSU-Puyallup, 7612 Pioneer Way E., Puyallup, WA 98371

Phone: (253) 445- 4522; E-mail: poplar@wsu.edu

### **Hybrid Poplar Website**

Please check out this on growing hybrid poplars as a crop.

http://www.hybridpoplar.org/

#### **IEA Newsletter Available**

The latest IEA Bioenergy Newsletter (June 2001) can be found at:

http://www.ieabioenergy.com/f\_newsletters.htm

# IEA Workshop Principles and Practice of Forestry in Densely-Populated Regions September 17-21, 2001 Veluwe Area, Gelderland, The Netherlands

The objective of the workshop is to share experiences and identify guiding principles for sustainable bioenergy production from forestry systems in densely-populated regions. Contributing papers dealing with any of the workshop topics are welcome.

Please email abstracts by August 15, 2001 to Jim Richardson, jrichardson@on.aibn.com. If you would like to attend, please print the registration form from the website, return the form and registration fee, by 15 August 2001.

http://www.ieabioenergy.com/f\_events.htm

### **Energy Crop Water and Nutrient Use Efficiency**

You may find a report completed as part of International Energy Agency Task 17, Short-rotation Crops of interest. This report reviews data available worldwide on water and nutrient use efficiency of energy crops, mostly woody crops. It also discusses the differing ways in which those characteristics have been measured and the problems with comparing data from different studies. The report would be of value to groups interested in developing research on this topic. The report can be found on the web at:

http://www.agrsci.dk/pvj/plant/uj/WUE41.pdf.pdf