

WOODY CROPS 2018

1st Announcement and Call for Abstracts

Conference Information

We are pleased to announce **WOODY CROPS 2018, International Short Rotation Woody Crops Conference**, to be held July 23-25, 2018 in Rhinelander, Wisconsin, USA. An optional pre-conference tour showcasing poplar tree improvement in Minnesota, USA will be held July 22-23, 2018, and a post-conference tour highlighting phytotechnologies in Wisconsin, USA will take place July 25-27, 2018. The conference is a joint meeting of the:

Short Rotation Woody Crops Operations Working Group
Poplar and Willow Council of Canada
IUFRO Working Party 2.08.04 (Physiology and Genetics of Poplars and Willows)
IUFRO Working Party 1.03.00 (Short Rotation Forestry)
International Energy Agency Task 43 (Biomass Feedstocks for Energy Markets)
International Poplar Commission Environmental and Ecosystem Services Working Party



Historically, international efforts for the development of short rotation woody crops (SRWCs) focused on the production of biomass for bioenergy, biofuels, and bioproducts, while research and deployment over the past decade has expanded to include broader objectives of achieving multiple ecosystem services. In particular, silvicultural prescriptions developed for SRWCs have been refined to include woody crop production systems for environmental benefits such as carbon sequestration, water quality and quantity, and soil health. In addition, current systems have been expanded beyond traditional fiber production to other environmental technologies that incorporate SRWCs as vital components for phytotechnologies (e.g., phytoremediation), urban afforestation, ecological restoration, and mine reclamation.

The International Short Rotation Woody Crops Conference will bring together six of the world's leading SRWC organizations to enhance information exchange and provide a platform for developing future collaboration around SRWC production systems.

SUBMIT ABSTRACTS THROUGH May 1, 2018 (DEADLINE EXTENDED - see details below)

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Topic Areas

The conference will explore the following and other topic areas related to SRWC production systems:

1. Ecosystem services
2. Phytotechnologies
3. Biomass production
4. Genetics and physiology
5. Harvesting and logistics
6. Social factors and policy issues
7. Wood products and conversion

Abstract Submissions

Abstracts will be accepted through **May 1, 2018 (DEADLINE EXTENDED)**.

Submit abstracts in English using MS Word to Ron Zalesny (rzalesny@fs.fed.us). Label filenames with the last name of the corresponding author followed by "SRWC2018" (i.e., "Smith SRWC2018"). Each abstract will receive at least two technical reviews. The abstract should be typed in 11-point Times New Roman font with 1.5-line spacing and 1.9-cm margins, and the content should adhere to the following structure (for review presentations, the abstract body may be limited to Background and Conclusions):

Title (in bold)

Author names (indicate corresponding author with an asterisk)

Author affiliations (on separate lines, denoted by numerical superscripts after names)

Abstract Body (500-word maximum)

Background

Methods

Results

Conclusions

Keywords

Preferred topic area (1-8 above)

Preferred format (oral or poster)

Young professional (e.g., undergrad/grad student, post-doc, etc.) (yes or no)

Authors will be notified of abstract acceptance and presentation formats by **May 15, 2018**.

An example abstract is included in the appendix below.

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Publication of Abstracts and Manuscripts

Accepted abstracts will be compiled into a conference report and published in the following Special Issue of the online Open Access journal 'Forests': *Short Rotation Woody Crop Production Systems for Ecosystem Services and Phytotechnologies*. An example of a previously-published conference report can be found at: <http://www.mdpi.com/2072-6643/9/4/348> (doi:10.3390/nu9040348).

In addition to the conference report, manuscripts related to both oral and poster presentations can be submitted for peer-review in the Special Issue of 'Forests' through **November 1, 2018**. More information on manuscript submission can be found at: http://www.mdpi.com/si/forests/woody_crop_production.

Conference Program

Woody Crops 2018: International Short Rotation Woody Crops Conference

Preliminary Program

	July 22 Sunday	July 23 Monday	July 24 Tuesday	July 25 Wednesday	July 26 Thursday	July 27 Friday
0700						
1000	Poplar Breeding Pre-Conference Tour (start in Minneapolis, MN) (Cohasset, MN) (Grand Rapids, MN)	Poplar Breeding Pre-Conference Tour (Duluth, MN)	Plenary Session (Rhinelander, WI)	Technical Sessions (Rhinelander, WI)	Phytotechnologies Post-Conference Tour (Whitelaw, WI) (Manitowoc, WI) (Fond du Lac, WI)	Phytotechnologies Post-Conference Tour (Milwaukee, WI)
1200			Technical Sessions (Rhinelander, WI)			
1500		USDA Forest Service Welcome Tour (Rhinelander, WI)		Phytotechnologies Post-Conference Tour (Green Bay, WI)		Farewell Lunch (Milwaukee, WI)
1800		Welcome Reception (Rhinelander, WI)	Banquet (Rhinelander, WI)	Dinner on your own (Green Bay, WI)	Group Dinner (Milwaukee, WI)	
2100	Dinner on your own (Duluth, MN)					Transportation to Hotel and Airport

Plenary Speakers

Dr. Jud Isebrands, Environmental Forestry Consultants, New London, Wisconsin, USA

Dr. Biljana Kulišić, Energy Institute Hrvoje Pozar, Zagreb, Croatia

Dr. Andrej Pilipović, Institute of Lowland Forestry and Environment, University of Novi Sad, Novi Sad, Serbia

Dr. Barb Thomas, University of Alberta, Edmonton, Alberta, Canada

Dr. Joris Van Acker, Laboratory of Wood Technology, University of Gent, Gent, Belgium

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Venue

The conference venue is the Nicolet Area Technical College **Lakeside Center Theatre, Commons, and Terrace located at 5364 College Drive, Rhineland, Wisconsin 54501.**

Nicolet Area Technical College is a public community college serving Northern Wisconsin. The College offers one- and two-year career diplomas and degrees, liberal arts university transfer studies, and a comprehensive continuing education program.

For more information about the College, visit <http://www.nicoletcollege.edu>.



Lodging

Visit <http://explorerhineland.com/lodging/> for a full list of lodging options, including campgrounds, cottages, hotels, and resorts. All lodging options are completely non-smoking.

Blocks of rooms (under the code '**Biomass2018**') for the nights of Monday, July 23 and Tuesday, July 24 have been reserved at the following hotels until the dates indicated below. After these dates, rooms may not be available. All prices are listed in US dollars (USD).

With the exception of Holiday Acres Resort, all hotels listed below are included in the free conference bus transportation route, and all hotel prices include a free hot breakfast.

AmericInn Lodge and Suites Rhineland

<https://www.americinn.com/hotels/wi/rhineland>

648 West Kemp Street, Rhineland, Wisconsin 54501

+1 715-369-9600

\$109 + tax per night (standard double room, two queen beds)

25 rooms available until June 23, 2018

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Comfort Inn

<https://www.choicehotels.com/wisconsin/rhinelanders/comfort-inn-hotels/wi049?source=lb>

1490 Lincoln Street, Rhinelanders, Wisconsin 54501

+1 480-386-9526

\$109 + tax per night (standard double room, two queen beds)

25 rooms available until June 23, 2018

Hot breakfast included in room price

Days Inn and Suites

<https://www.wyndhamhotels.com/days-inn/rhinelanders-wisconsin/days-inn-rhinelanders/overview>

70 North Stevens Street, Rhinelanders, Wisconsin 54501

+1 715-362-7100

\$99 + tax per night

25 rooms available until June 23, 2018 (15 rooms with two queen beds, 10 rooms with one queen bed)

Hot breakfast included in room price

Holiday Acres Resort (venue for the banquet)

<http://www.holidayacres.com/>

4060 South Shore Drive, Rhinelanders, Wisconsin 54501

+1 715-369-1500

\$135.16 + tax per night (standard lower level, two queen beds) – 1 room total

\$151.52 + tax per night (upper level with fireplace, one queen bed) – 1 room total

\$129.72 + tax per night (standard upper level, one king bed) – 1 room total

\$146.06 + tax per night (upper level sunrise, two queen beds) – 1 room total

\$167.86 + tax per night (upper level with whirlpool, one king bed) – 1 room total

All rooms available until June 20, 2018

Hot breakfast is NOT included in room price but is available for an extra charge

Quality Inn

<https://www.choicehotels.com/wisconsin/rhinelanders/quality-inn-hotels/wi192>

668 West Kemp Street, Rhinelanders, Wisconsin, 54501

+1 715-369-3600

\$82 + tax per night (standard double room, two queen beds) – 15 rooms total

\$72 + tax per night (standard single room, one king bed) – 10 rooms total

All rooms available until June 30, 2018

Hot breakfast included in room price

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Travel Logistics

A free bus will be provided throughout the conference to transport participants to/from the welcome reception, technical sessions, and banquet.

Air Travel (distance from Rhinelander is listed in parentheses)

Regional / National Airports

Rhinelander-Oneida County Airport (RHI) (<http://www.fly-rhi.org/>) (3 miles)
Central Wisconsin Airport (CWA) (<https://www.fly-cwa.org>) (73 miles)
Green Bay Austin Straubel International Airport (GRB) (<http://www.flygrb.com>) (130 miles)
Duluth International Airport (DLH) (<http://duluthairport.com>) (190 miles)
Dane County Regional Airport (MSN) (<https://www.msnairport.com>) (200 miles)

International Airports

Minneapolis-St. Paul International Airport (MSP) (<https://www.mspairport.com/>) (230 miles)
General Mitchell International Airport (MKE) (<https://www.mitchellairport.com/>) (250 miles)
Chicago-O'Hare International Airport (ORD) (<http://www.flychicago.com>) (320 miles)

Planning Committee

Conference Chairs

Ron Zalesny Jr., USDA Forest Service, Northern Research Station
Email: rzalesny@fs.fed.us

Bill Headlee, University of Arkansas at Monticello
Email: headlee@uamont.edu

Raju Soolanayakanahally, Agriculture and Agri-Food Canada
Email: raju.soolanayakanahally@agr.gc.ca

Jim Richardson, Poplar and Willow Council of Canada
Email: jrichardson@on.aibn.com

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Technical Committee

Robert Froese	Michigan Technological University
Emile Gardiner	USDA Forest Service, Southern Research Station
Solomon Ghezehei	North Carolina State University
Jessica McCord	University of Tennessee
Bernie McMahon	University of Minnesota – Natural Resources Research Institute
Dana Mitchell	USDA Forest Service, Southern Research Station
Tim Rials	University of Tennessee
Randy Rousseau	Mississippi State University
Erik Schilling	National Council for Air and Stream Improvement (NCASI)
Brian Stanton	GreenWood Resources
Bryce Stokes	Navarro Engineering
Tim Volk	State University of New York, College of Environmental Science & Forestry (ESF)

Registration

Full registration information is expected to be available before February 28, 2018 on the websites of the Short Rotation Woody Crops Operations Working Group (www.woodycrops.org) and Poplar and Willow Council of Canada (www.poplar.ca).

Sponsors



Appendix A: Sample Abstract

Survival and growth of poplars and willows grown for phytoremediation of fertilizer residues

Ronald S. Zalesny Jr.^{1,*}, Edmund O. Bauer²

¹ *USDA Forest Service, Northern Research Station, Institute for Applied Ecosystem Studies, Rhinelander, WI, USA; *Presenting author: rzalesny@fs.fed.us*

² *Iowa State University, Department of Natural Resource Ecology and Management, Ames, IA, USA*

Background: Species and hybrids belonging to the genera *Populus* (poplar) and *Salix* (willow) have been used successfully for phytoremediation of contaminated soils. However, genotypic screening using phyto-recurrent selection is necessary prior to large-scale deployment because of the broad amount of variation among and within poplar and willow clones.

Objectives: Thus, in order to identify promising genotypes for potential use in future phytotechnologies, the objectives of the current study were to: 1) evaluate the genotypic variability in survival, height, and diameter of poplar and willow clones established on soils heavily contaminated with fertilizer residues (i.e., nitrates), and 2) assess the genotypic stability in survival and diameter of selected poplar clones after one and eleven growing seasons.

Methods: We evaluated these traits after first year budset by testing 27 poplar and 10 willow clones planted as unrooted cuttings, along with 15 poplar clones planted as rooted cuttings. The cuttings were planted in randomized complete blocks at an agricultural production facility in the Midwestern, United States. After eleven growing seasons, and using phyto-recurrent selection, we surveyed survival and measured diameter of 27 poplar clones (14 unrooted, 13 rooted) that were selected based on superior survival and growth throughout plantation development.

Results: There was a broad amount of genotypic variability in survival, height, and diameter during establishment. Overall, willow exhibited the greatest survival, while poplar had the greatest height and diameter. At eleven years after planting, superior clones were identified that exhibited above-average diameter growth at establishment- and rotation-age, most of which had stable genotypic performance over time.

Conclusions: From these results, selection of specific clones was favorable to genomic groups, based on the geographic location and soil conditions of the site.

Keywords: genotypic stability; genotypic variability; phytotechnologies; *Populus*; *Salix*

Preferred topic area: 2

Preferred format: oral

Young professional (e.g., undergrad/grad student, post-doc, etc.): no