

Incorporating Bioenergy into Sustainable Landscape Designs Workshop Agenda

March 4–6, 2014 | New Bern, North Carolina

DAY 1—TUESDAY, MARCH 4, 2014: FIELD TRIP

8:00 a.m.	Meet at hotel, attend safety overview, and distribute handouts
8:15 a.m.–9:00 a.m.	Travel to Lenoir, North Carolina
9:00 a.m.–10:20 a.m.	<p>Arrive at Lenoir, North Carolina</p> <ul style="list-style-type: none"> <i>The Lenoir 1 study is a plot-scale research site located near Dover, North Carolina. There are 28.8 hectare (ha) plots with pine, switchgrass, and intercropped plots—with and without residual removal. Many studies are being conducted at this site, including the effects of bioenergy practices on biodiversity, soil, carbon, surface, and groundwater.</i>
10:20 a.m.–11:20 a.m.	Travel to the mill
11:20 a.m.–1:40 p.m.	<p>Mill tour and lunch</p> <ul style="list-style-type: none"> <i>Stop at the New Bern, Weyerhaeuser facility, visit the sawmill, and hear speakers discuss the supply chain.</i>
1:40 p.m.–2:40 p.m.	Travel to Carteret, North Carolina
2:40 p.m.–4:00 p.m.	<p>Arrive at Carteret, North Carolina</p> <ul style="list-style-type: none"> <i>The Carteret 7 study is in Carteret County, North Carolina, and consists of four watersheds of about 25 ha each. They are flat and very poorly drained with a shallow water table and are drained by parallel ditches. Treatments are young pine, mid-rotation pine, switchgrass, and intercropped stands. Research being conducted here is predominantly surface and groundwater related and based on 25 years of data collection, analysis, and modeling. In addition to the research plots, we will visit a recently harvested stand.</i>
4:00 p.m.–4:45 p.m.	Travel back to the hotel



Intercropped site at Carteret.

DAY 2—WEDNESDAY, MARCH 5, 2014: WORKSHOP

8:00 a.m.–8:30 a.m.	Registration and networking
8:30 a.m.–9:00 a.m.	<p>Introduction to workshop</p> <ul style="list-style-type: none"> <i>Welcome—Alison Goss Eng</i> <i>Workshop goals and a brief description of the U.S. Department of Energy's Bioenergy Technologies Office—Kristen Johnson and Mark Elless</i> <i>Overview of two workshops on sustainable landscape designs—Cristina Negri</i> <i>Individual introductions</i>
9:00 a.m.–10:00 a.m.	<p>Pressures on resources in the southeastern region of the United States</p> <ul style="list-style-type: none"> <i>Eastern North Carolina Land Use History 101—Joe Hughes</i> <i>Pressures on forests in the southeastern region of the United States—Bob Abt</i> <i>Key environmental challenges in the southeastern region of the United States—Jessica Daniel</i> <i>Discussion</i>
10:00 a.m.–10:30 a.m.	Break
10:30 a.m.–11:15 a.m.	<p>Landscape design approach for woody biomass used for bioenergy</p> <ul style="list-style-type: none"> <i>A landscape design approach that incorporates bioenergy systems—Virginia Dale</i> <i>Projected effects of biofuel production on landscapes in North Carolina—Jennifer Costanza</i> <i>Discussion</i>
11:15 a.m.–12:30 p.m.	<p>Current systems that use forest biomass for bioenergy</p> <ul style="list-style-type: none"> <i>Agroforestry in the southeastern region of the United States—Alan J. Franzluebbers</i> <i>European perspectives—Floor van der Hilst</i> <i>Panel and discussion</i> <ul style="list-style-type: none"> <i>Land holders' perspectives: large private forest land owner—Bob Emory</i> <i>Land holders' perspectives: small private forest land owner—Frank Rackley</i>

12:30 p.m.–1:30 p.m.	Lunch
1:30 p.m.–2:15 p.m.	<p>Panel on priority environmental concerns for woody biomass systems</p> <ul style="list-style-type: none"> • <i>Bottomland forests and wetland systems—Al Lucier</i> • <i>Greenhouse gas emission calculations for forest operations involving residues—Reid Miner</i> • <i>Residual removal and biodiversity—Jessica Homyack</i> • <i>Other issues and discussion</i>
2:15 p.m.–3:00 p.m.	<p>Break-out group: Provide a list of potential opportunities to use landscape design that addresses the main sustainability concerns of forest systems supplying bioenergy. Each breakout group will address one aspect of this topic.</p> <ul style="list-style-type: none"> • <i>Group 1A. What are the priority concerns, and how can they be addressed with landscape design?</i> • <i>Group 1B. What aspects of landscape design have been used thus far, that improve the sustainability of forest biomass? What are the pros and cons of these different approaches?</i> • <i>Group 1C. What steps are necessary to implement these opportunities?</i>
3:00 p.m.–3:30 p.m.	Break
3:30 p.m.–4:30 p.m.	<p>Case studies of how forest systems use landscapes</p> <ul style="list-style-type: none"> • <i>Agriculture and Forest Research Initiative Coordinated Agriculture projects</i> <ul style="list-style-type: none"> ◦ <i>Southeastern Partnership for Integrated Biomass Supply Systems—Steve Kelley</i> ◦ <i>Northeast Woody/Warm Season Biomass Consortium—Tim Volk</i> ◦ <i>Systems for advanced biofuels production for woody biomass in the Pacific Northwest—Nathan Parker</i> • <i>Brazilian experience—Arnaldo Walter</i> • <i>Discussion</i>
4:30 p.m.–5:00 p.m.	Plenary discussion: Breakout groups report back

DAY 3—THURSDAY, MARCH 6, 2014: WORKSHOP

7:30 a.m.–8:00 a.m.	Networking
8:00 a.m.–8:45 a.m.	<p>Breakout groups reconvene: Provide a list of recommended goals and practices that support the integration of bioenergy into the sustainable design of forested landscapes. Each breakout group will address one aspect of this topic.</p> <ul style="list-style-type: none"> • <i>Group 2A. How could these recommended goals and practices be implemented and what are the next steps of implementation?</i> • <i>Group 2B. What are the science gaps and other obstacles that exist, preventing broad application of landscape design approaches in systems that use woody biomass for bioenergy?</i> • <i>Group 2C. Are there lessons learned from bioenergy systems that use woody biomass that could be offered to other systems (e.g., agriculture)?</i>
8:45 a.m.–9:45 a.m.	<p>Panel: Recommended practices for using forest biomass for feedstocks—State of the Art</p> <ul style="list-style-type: none"> • <i>Environmental and governance challenges for mobilization of sustainable forest bioenergy supply chains—Tat Smith</i> • <i>Sustainable Forestry Initiative—Nadine Block</i> • <i>Forest Guild—Alyx Perry</i>
9:45 a.m.–10:10 a.m.	<p>Panel: Can landscape design principles be applied to help meet regulatory requirements for sustainable feedstock?</p> <ul style="list-style-type: none"> • <i>Biomass Market Access Standards—Jody Endres</i> • <i>Roundtable on sustainable biomaterials—Matt Rudolf</i> • <i>Discussion</i>
10:10 a.m.–10:30 a.m.	Break
10:30 a.m.–11:15 a.m.	Breakout groups report back
11:15 a.m.–12:00 p.m.	<p>Plenary group discussion</p> <ul style="list-style-type: none"> • <i>Tangible next steps to move forward with landscape design for bioenergy in a manner that best serves industry, decision makers, and producers.</i> • <i>A plan for collaborative research or other opportunities moving forward.</i>
12:00 p.m.	Adjourn