Interactive Poster: Perceived Risks of Wood Pellet Production in the Southeastern US

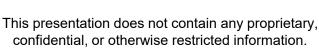
International Workshop on Adequacy of Data for Conducting Risk Assessments of Sustainable Wood Sourcing Practices for Wood Pellet Exports 01-03 May Athens, GA

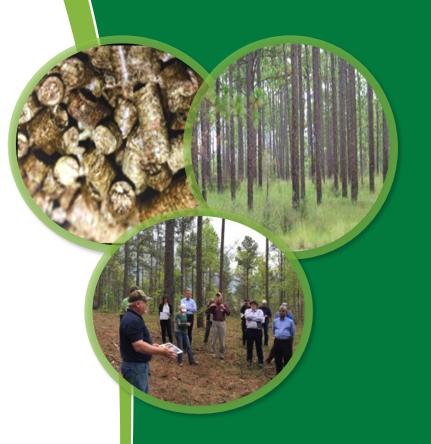
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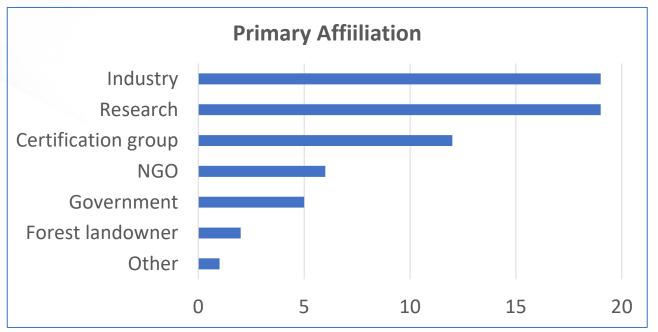


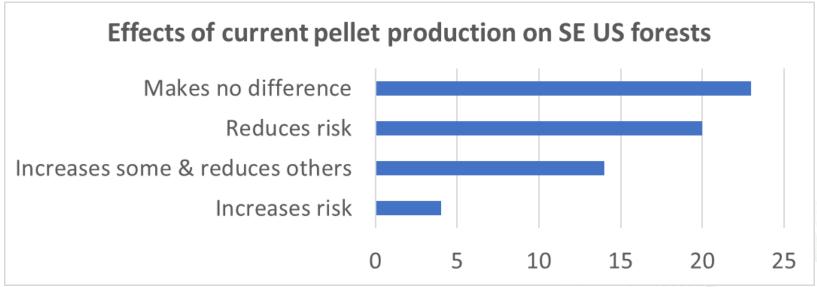




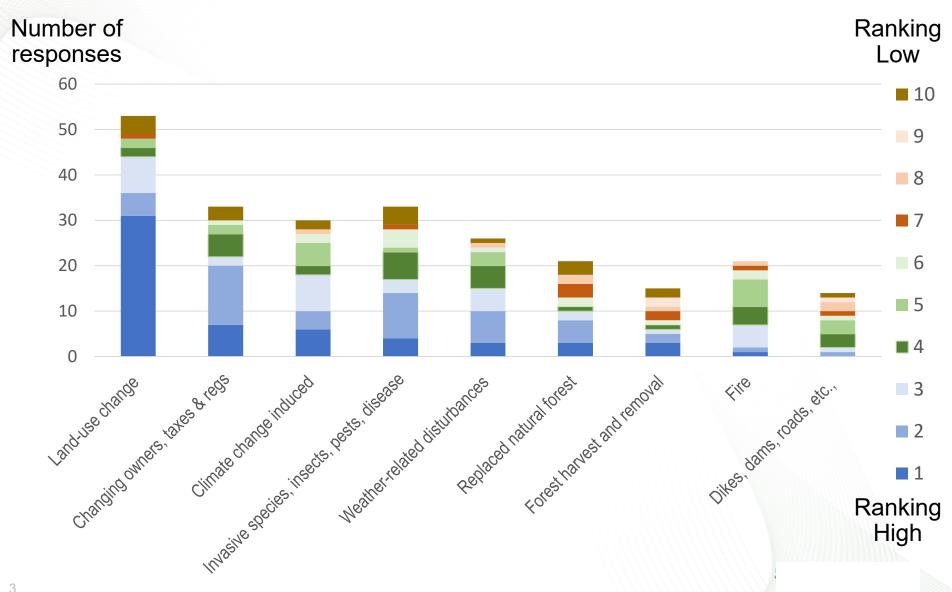


Responses to questionnaire



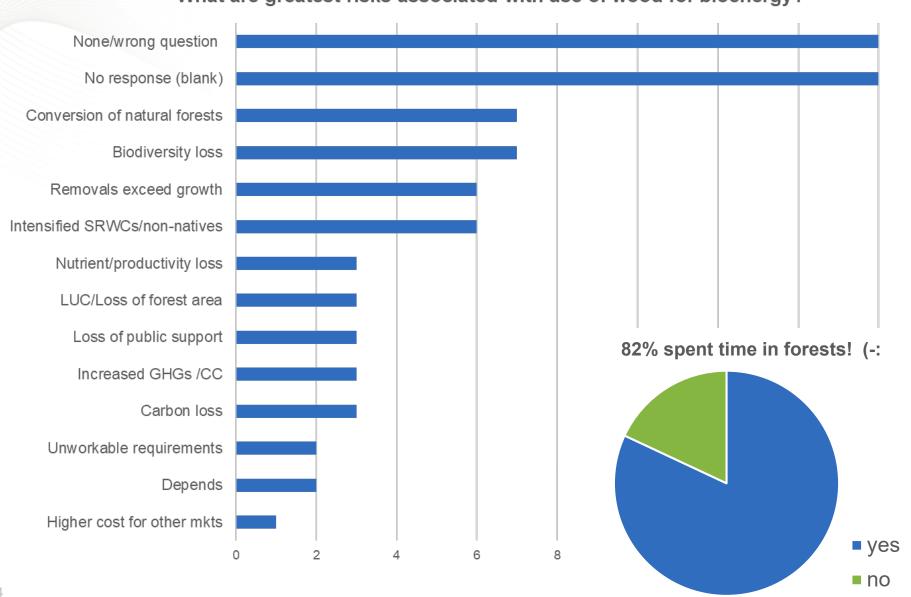


Risks to SE Forests in the Next 10-20 Years (as reported by workshop participants)



Responses to questionnaire

What are greatest risks associated with use of wood for bioenergy?



Number of responses (N) = 61



Premise: addressing risks of using forest biomass for energy requires an understanding of perceived risks to forests

- What is the evidence & analysis needed to
 - Verify extent, intensity, times & locations for risks
 - > Characterize trends and causal drivers for risks
 - Consider how pellet production interacts with these factors





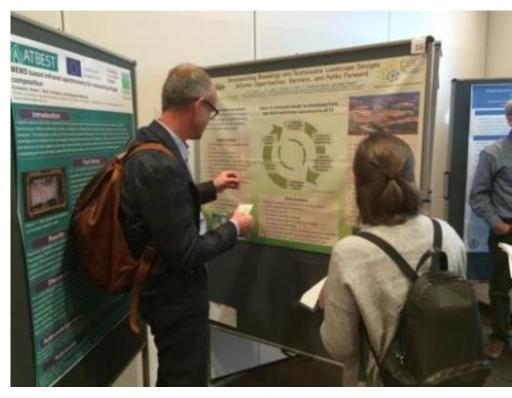




Diverse means can be used to learn about perceived risks

- Literature reviews
- Polls & 3rd party surveys
- Legal proceedings
- Focus group meetings
- Interactive posters...





Dale VH, Kline KL. (2017) Interactive Posters: A valuable means for enhancing communication & learning about productive paths toward sustainable bioenergy. *Bio-FPR 11(2): 243-246.*http://onlinelibrary.wiley.com/doi/10.1002/bbb.1753/epdf



Poster sessions promote discussion









"Interactive" means that you contribute:

- Discuss issues
- Apply sticky dots
- Add comments and ideas to poster



Potential Risks from Bioenergy Production Risks are negative, but effects could be positive

- Air quality degradation
- Higher cost to other forest sectors (e.g. pulp)
- Increase in greenhouse gas emissions
- Loss of biodiversity (saprophytes compromised)
- Loss of hardwood & mixed forests
- Loss of long-term forest productivity
- Loss of soil carbon / decline in soil quality (dead wood removal)
- Loss of total forest area
- Recreation & scenic value decline
- Removals exceed growth rates
- Water quality degradation
- Social discord over forest management, loss of public support











IDENTIFYING POTENTIAL RISKS FROM BIOENERGY PRODUCTION:

AN INTERACTIVE POSTER



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Premise: Understanding and addressing risks of using woody biomass from SE forests for energy requires reliable information to characterize each risk and the forces affecting that risk.

Interactive Poster Instructions

POTENTIAL RISKS FROM BIOENERGY PRODUCTION	1. ADD DOTS HERE: Green = risk is mitigated by sourcing wood for bioenergy from SE forests; Blue = there is no significant risk; Red = risk is exacerbated by sourcing wood for bioenergy.	2. OTHER FACTORS INFLUENCING THIS RISK: Please insert #'s per	3. Identify SOURCE(S) OF EVIDENCE SUPPORTING YOUR BELIEF ABOUT HOW BIOENERGY PRODUCTION AFFECTS RISKS. Do not repeat information already presented. Please insert on sticky or pen the letter per the adjacent list (A,B,C, etc.) or add new references and sources of data or analysis that support your choice of dots: Green sticky for reduction of risk; Blue sticky for no risk; Red sticky for increased risk.
Air quality degradation			
Higher cost to other forest sectors (e.g., pulp) Increase in greenhouse gas emissions			
Loss of biodiversity			
Loss of hardwood & mixed forests			
Loss of long-term forest productivity			
Loss of soil carbon / decline in soil quality			
Loss of total forest area			
Recreation & scenic value decline			
Water quality degradation			



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Air quality degradation			
Higher cost to other forest sectors (e.g., pulp)			
Increase in greenhouse gas emissions			
Loss of biodiversity	Indicate your		
Loss of hardwood & mixed forests	perspective o	_	
Loss of long-term forest productivity	by placing on	<u>e</u> dot	
Loss of soil carbon / decline in soil quality	(red, green or	blue)	
Loss of total forest area	for <u>each</u> row	(risk) _	
Recreation & scenic value decline	in this columi		
Water quality degradation	Cir dina datam	-	



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Air quality degradation			intions
Higher cost to other forest sectors (e.g., pulp) Increase in greenhouse gas emissions Loss of biodiversity Loss of hardwood & mixed forests Loss of long-term forest productivity Loss of soil carbon / decline in soil quality	Indicate other facto influencing each risk	75 2. S.	Factors Fac
Recreation & scenic value decline Water quality degradation		these tw	information gaps in vo columns (no need at information here



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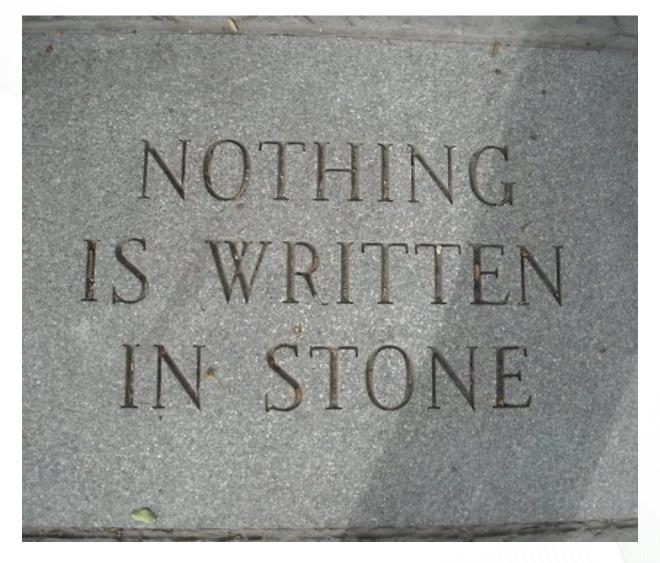
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Air quality degradation			N
Higher cost to other forest sectors (e.g., pulp)	Exa Evi	amples of Supporting	
Increase in greenhouse gas emissions	/ 1. A	Pt et al. 20.	[Identify]
Loss of biodiversity	D. C.	neto	
Loss of hardwood & mixed forests	an C. Da	ostanza et al. 2016. Bio d forest landscape cha le et al. 2001. Forest	evidence
Loss of long-term forest productivity	dist	d forest landscape cha le et al. 2001. Forest urbances	inge
Loss of soil carbon / decline in soil quality		1-00	
Loss of total forest area			
Recreation & scenic value decline			
Water quality degradation		Help fill information gaps in these two columns (no need to repeat information here	

All ideas are welcome - so have fun!



Ask questions and discuss issues

Summary of poster instructions

- 1. Risks you perceive. One dot for each risk/row:
 - Green dot: risk can be mitigated by sourcing wood for bioenergy from SE forests
 - Blue dot: there is no significant risk
 - Red dot: risk will be exacerbated by sourcing wood for bioenergy from SE forests.
- 2. Other factors influencing this risk (insert <u>number</u> per the adjacent list or add new factor)
- 3. Evidence supporting your belief about how bioenergy affects risks
 - Write <u>letter</u> per the adjacent list or <u>add new</u> evidence
 - Green sticky for reduction of risk;
 - Blue sticky for no risk;
 - Red sticky for increased risk
 - Fill information gaps but please do not repeat information in final two columns



Other Factors

- 1. Changing owners, regulations
- 2. Climate-change
- 3. Expanding protected areas
- 4. Dams, roads, developments
- 5. Fire...

Examples of Supporting

Evidence

A. Abt et al. 2014. Effect of

B. Costanza et al. 2016. Bioenergy and forest landscape change... C. Dale et al. 2001. Forest

disturbances...





Questions?





https://cbes.ornl.gov/





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