

Overview of AfforDenmark workshop				
The workshop centers on four main objectives that aim to: 1) address challenges in current afforestation schemes in Denmark 2) align knowledge between science and the best afforestation practices 3) identify new frontiers in forest science 4) propose pathways towards creating a new climate-resilient forest landscape To meet the four objectives outlined above we will organize the workshop around four key themes. These themes address afforestation plans in Denmark within the context of the Green Tripartite (Theme 1; T1), clarify the theoretical and predicted climate change mitigation potential of planted forests (T2&3), and discuss the potential of forests to mitigate N loss (T4). T1. Afforestation in Denmark: Perspectives from policymakers, scientists, and stakeholders. T2. Climate resilience of forests: Theories and observations. T3. Predicting greenhouse gas mitigation potential of forests: Techniques and uncertainties. T4. Nitrogen loss mitigation related to afforestation.				
Schedule				
Time	Day1 (Oct 20) Aarhus University (1630-301)		Day2 (Oct 21) Aarhus University (1630-301)	
8:30-9:00			Coffee (in the hall)	
9:00-9:40			Arthur Gessler (Swiss Federal Research Institute WSL, Switzerland) <i>Ecophysiology-guided climate-smart forestry: mechanisms, management, and implications for afforestation planning</i>	Per Gundersen (KU, Denmark) <i>Nitrate leaching from new forests on former cropland – surveys and long-term monitoring</i>
9:40-10:20			Lars Vesterdal (KU, Denmark) <i>Soil and ecosystem carbon sequestration following cropland afforestation – Danish studies over 25 years</i>	T4. Nitrogen loss mitigation related to afforestation Christine L Goodale (Cornell University, USA) <i>Nitrogen accumulation and redistribution over forest succession</i>
10:20-11:00			Jesper Riis Christiansen (KU, Denmark) <i>Soil greenhouse gas fluxes in wetter forests</i>	Scott Ollinger (University of New Hampshire, USA) TBD
11:00-12:00			Poster session by junior scientists	
12:00-13:00	Lunch & Welcome & Opening address (in the hall)		Lunch break	
13:00-13:40	T1. Afforestation in Denmark: Perspectives from policymakers, scientists, and stakeholders	Klaus Butterbach-Bahl (AU, Denmark) <i>Overview of the AfforDenmark workshop</i> Xiaoyu Cen (AU, Denmark) <i>Introduction to FutureFor-DK project</i>	T3. Predicting greenhouse gas mitigation potential of forests: Techniques and uncertainties	Rüdiger Grote (Karlsruhe Institute of Technology, Germany) TBD
13:40-14:20		Bettina Helle Jensen (The Danish Agency for Green Area Conversion and Aquatic Environment, Denmark) <i>Afforestation in Denmark - Agreement on a Green Denmark</i>		Nicolas Delporte (Karlsruhe Institute of Technology, Germany) <i>ForestOvershoot: improving carbon sequestration in Germany by forest management</i>
14:20-15:00		Mathias Lykke Nygård Johansen (The Danish Forest Association, Denmark) <i>From agreement to implementation: Challenges and uncertainties for afforestation under the Green Tripartite</i>		Majken Caroline Looms Zibar (KU, Denmark) <i>Quantifying the effect of forests on the water balance at the soil-atmosphere interface</i>
15:00-15:30	Coffee break (in the hall)		Coffee break (in the hall)	
15:30-17:00	T1. Discussion: Afforestation as a sustainable carbon sink and climate protection - do we over promise? (tentative)		T2 & T3. Discussion: Afforestation threatened by climate extremes - knowledge gaps, predictions and uncertainties. (tentative)	
	Group dinner (invited speakers)			

List of speakers			
Name (alphabetic order)	Title	Institution	Area of work
Arthur Gessler	Professor, Head of research unit	Swiss Federal Research Institute WSL	Forest ecophysiology; biogeochemistry; climate resilience
Bettina Helle Jensen	Head of division	Styrelsen for Grøn Arealomlægning og Vandmiljø	Afforestation policy; forest subsidy schemes (Grants–Water & Nature)
Christine L Goodale	Professor, Department chair	Cornell University	Forest biogeochemistry; C and N cycling; global change
Jesper Riis Christiansen	Associate professor	University of Copenhagen	Soil biogeochemistry; greenhouse gases; ecosystem hydrology
Klaus Butterbach-Bahl	Professor, Pioneer center director	Aarhus University	Biogeochemistry; N cycling; greenhouse gases; ecosystem modelling
Lars Vesterdal	Professor	University of Copenhagen	Forest soils; soil carbon; nutrient cycling; afforestation
Majken Zibar	Associate professor	University of Copenhagen	Hydrogeophysics; soil hydrology; groundwater recharge
Mathias Lykke Nygård Johansen	Chief consultant	The Danish Forest Association	Afforestation; forest policy; LULUCF; forest economics
Nicolas Delporte	Postdoc researcher	Karlsruhe Institute of Technology	Theoretical physics; climate change; forest evolution and modelling
Per Gundersen	Professor	University of Copenhagen	Forest N cycling; N deposition; nitrate leaching; soil carbon
Rüdiger Grote	Senior scientist	Karlsruhe Institute of Technology	Forest ecophysiology; ecosystem modelling; climate impacts
Scott Ollinger	Professor	University of New Hampshire	Forest ecology; biogeochemistry; remote sensing; ecosystem modelling