Mixed species forests risks, resilience and management

Lund, Sweden 25-27 March 2020



Mixed forests are a strategic means of adapting forest management to climate change. Higher tree species diversity is expected to provide higher productivity, higher temporal stability, lower risk of biotic and abiotic damage and a more diverse portfolio of ecosystem services from forests.

Although the knowledge base concerning the ecology of mixed forests has increased during the last decades, most forest reserach has been conducted in single-species stands. As a result there is a lack of knowledge about how to design and

manage mixed forests, to sustain production and carbon sequestration, and mitigate abiotic and biotic risks.

It is our expectation that this conference will be an arena for discussion and communication between researchers from different disciplines, and also between managers and policy makers. Our main objective is thus to communicate the stateof-the-art scientific knowledge in various fields connected to both mixed forest functioning and management.

Deadline for abstracts 1 November!

Submitt your abstract here: www.mixedforest2020.se









Organized by: IUFRO (the International Union of Forest Research Organizations) and SLU (Swedish University of Agricultural Sciences)



A cooperation

The conference will be organized by several networks, which ensures broad participation and the maximization of scientific exchange: SUMFOREST ERA-Net research project Mixed species forest management: Lowering risk, increasing resilience; IUFRO research groups 1.09.00 Ecology and silviculture of mixed forests and 7.03.00 Entomology; IUFRO working parties 1.01.06 Ecology and silviculture of oak, 1.01.10 Ecology and silviculture of pine and 8.02.01 Key factors and ecological functions for forest biodiversity, and the Faculty of Forest Sciences at SLU.

Scientific committee

Assoc. Prof Anna Barbati, Italy; Prof Felipe Bravo, Spain; Senior researcher Andres Bravo-Oviedo, Spain; Senior researcher Hervé Jactel, France; Prof Magnus Löf, Sweden; Prof Hans Pretzsch, Germany; Senior researcher Miren del Rio, Spain.

Organizing committee

Prof Magnus Löf; Dr Jorge Aldea; Dr Ignacio Barbeito, Sweden.

Other details

√ The venue of this event is AF Borgen in Lund, Sweden http://en.afborgen.se/, unless noted.

√ Lund is located in southernmost Sweden http://www.visitlund.se/en with excellent train connection (ca ½ hour) to Copenhagen international aiport.

 $\sqrt{\text{All oral presentations will be in plenary session held in English.}}$

 $\sqrt{}$ During the conference a half-day field excursion will be organized to nearby mixed forests.

 $\sqrt{}$ The website will be updated regularly with details about program, registration, call for papers and deadlines for abstract submission etc. www.mixedforest2020.se

√ A selection of communications presented is planned to be published in a special issue of the international journal, Forest Ecology and Management (published by Elsevier)

√Any questions, contact Magnus Löf, magnus.lof@slu.se



Preliminary program

Tuesday 24 March 2020

18:00-20:00 Registration and welcome reception

Wednesday 25 March

Full day indoors

Introduction

Session 1: Resistance and resilience of mixed forests following disturbances

Resistance and resilience of mixed forests under e.g. changing climate and following climate extremes. Influence of disturbances on mixed forests, e.g. fire, wind, snow, insect outbreaks, pests and diseases. Plant-animal interactions.

Session 2: Ecosystem services from mixed forests

Multi-functionality of mixed forests through history. ESS at different spatial scales: from stands to landscapes. ESS data sources and trade-offs. Potential for management to promote multifunctional mixed forests, biodiversity conservation, recreation, wood quality, and carbon sequestration.

Thursday 26 March

Half-day indoors

Session 3: Dynamics and management of mixed forests

Biodiversity-productivity relationships, competition, facilitation and overyielding. Regeneration dynamics, growth and yield, thinning reactions and modelling. Management guidelines and objectives, design of plantations, adaptive measures, conversion of monocultures to mixed stands and cost-effective forest management.

13:00-18:00 Field trip to Snogeholm 20:00 Social dinner

Friday 27 March

Full day indoors

Session 3: Continues...

Session 4: Mixed forests and policy aspects

Mixed forests economy, risk management, socio-ecological dimensions of forest management, decision making, policy implementation and the science-policy-practice interface.

15:15-16:00 Oral communication and final conclusions 16:15 Departure

Key-note speakers

Anna Barbati

University of Tuscia, Italy

Lars Gamfeldt

University of Gothenburg, Sweden

Charlotte Grossiord

WSL, Switzerland

Hervé Jactel

INRA, France

Douglas A. Maguire

Oregon State University, USA

Hans Pretzsch

Technical university of Munich, Germany

Tamas Szedlak

European Commission, Belgium

