

RENECOFOR: what has been learned from 25 years of monitoring forest ecosystems?

Preliminary programme

Wednesday 11 October 2017

10:30 - 12:00 Reception of the participants

12:00 - 13:30 Lunch

Session 1 : Opening session

Opening words by the national funders of the RENECOFOR network

- French National Forestry Office (ONF)

13:30 - 14:10 - Ministry of Agriculture and Food (MAA)

- Ministry of Ecological and Solidarity-based Transition (MTES)

- French Environment and Energy Management Agency (Ademe)

14:10 - 14:25 Objectives and design of the conference

Manuel Nicolas (ONF, Head of the RENECOFOR monitoring network)

14:25 - 14:45 Looking back on the initial purpose of forest monitoring and of RENECOFOR network

Guy Landmann (GIP ECOFOR, Chairman of the Scientific board of the RENECOFOR network)

& Christian Barthod (MTES, Conseil général de l'environnement et du développement durable)

14:45 - 15:05 Current issues and challenges for forest monitoring

Annemarie Bastrup-Birk (European Environment Agency)

15:05 - 15:30 Overall discussion

15:30 - 16:00 Coffee break

Session 2 : How do forest trees respond to climate variations?

16:00 - 16:15 Opening of the session by the chairwoman

Myriam Legay (ONF, Head of the R&D Department)

16:15 - 16:35 Monitoring results about tree responses to climate variations (growth, phenology, fruit production)

François Lebourgeois (AgroParisTech, Laboratoire des Ressources Forêts-Bois)

& Nicolas Delpierre (Université Paris Sud, Laboratoire Ecologie Systématique et Evolution)

16:35 - 16:55 Modelling the processes behind tree response to anticipate the effects of climate change on forest stands

Xavier Morin & Isabelle Chuine (CNRS, Centre d'Ecologie Fonctionnelle et Evolutive)

16:55 - 17:15 Field observations are needed to calibrate remote-sensing tools, e.g. for assessing the date of leaf unfolding and senescence from pictures from satellites

Kamel Soudani (Université Paris Sud, Laboratoire Ecologie Systématique et Evolution)

17:15 - 17:45 Overall discussion

17:45 - 18:45 **Poster session**

Tuesday 12 October 2017

Session 3 : What role do forests play in sequestering carbon from the atmosphere?

8:30 - 8:45 Opening of the session by the chairwoman

Christine Deleuze (ONF, R&D Department)

8:45 - 9:05 Making use of both monitoring and inventory data to better understand the carbon cycling in forests. E.g. with the CASTANEA model.

Eric Dufrêne (CNRS, Laboratoire Ecologie Systématique et Evolution)

9:05 - 9:25 Forest soils contribute to carbon sequestration: repeated field measurements and correlations with potential factors

Mathieu Jonard (Université catholique de Louvain, Earth and Life Institute)

9:25 - 9:45 Monitoring forest ecosystems gives support to understanding processes of organic C dynamics in forests soils

Delphine Derrien (INRA, Unité Biogéochimie des Ecosystèmes Forestiers)

9:45 - 10:15 Overall discussion

10:15 - 10:45 Coffee break

Session 4 : Acidification and nutrient cycling in forest ecosystems

10:45 - 11:00 Opening of the session by the chairman

Laurent Saint-André (INRA, Unité Biogéochimie des Ecosystèmes Forestiers)

11:00 - 11:20 Has the reduction of atmospheric pollutions succeeded to decrease the acidifying deposition in France?

Aude Bourin (IMT Lille Douai, Sciences de l'Atmosphère et Génie de l'Environnement)

11:20 - 11:40 Acidification and eutrophication: towards a restoration of the fertility of forest soils?

Anaïs Saenger (Université catholique de Louvain, Earth and Life Institute)

11:40 - 12:00 How to model the combined effects of air pollution and climate change on forest ecosystems?

Anne Probst (CNRS, Laboratoire écologie fonctionnelle et environnement)

12:00 - 12:30 Overall discussion

Tuesday 12 October 2017 (Afternoon)

12:30 - 14:00 Lunch

Session 5 : Dynamics of persistent pollutants in forests

14:00 - 14:15	Opening of the session by the chairwoman <i>Anne Probst (CNRS, Laboratoire écologie fonctionnelle et environnement)</i>
14:15 - 14:30	Impacts and fate of trace metal pollution in forests <i>Laure Gandois (CNRS, Laboratoire écologie fonctionnelle et environnement)</i>
14:30 - 14:45	How did forest monitoring prove also useful for the prevention of the risks of radioactive pollution? <i>Yves Thiry (ANDRA, R&D Department)</i>
14:45 - 15:00	Studying forest as an indicator of persistent organic pollutants in the atmosphere and of their accumulation into the environment: an example with polycyclic aromatic hydrocarbons <i>Jérôme Poulénard (Université de Savoie, Environnements, Dynamiques et Territoires de la Montagne)</i>
15:00 - 15:30	Overall discussion

15:30 - 16:00 Coffee break

Session 6 : Studying and monitoring forest biodiversity

16:00 - 16:15	Opening of the session by the chairman <i>Hervé Jactel (INRA, Unité Biodiversité Gènes et Communautés)</i>
16:15 - 16:35	What has been learned from monitoring ground vegetation for 20 years? Results and methodological feedbacks <i>Jean-Luc Dupouey (INRA, Unité Ecologie et Ecophysiologie Forestières)</i>
16:35 - 16:55	What factors control the species richness and the variations of fungal communities in forests? <i>Benoît Richard (Université de Rouen, Unité Etude et Compréhension de la Biodiversité)</i>
16:55 - 17:15	Understanding the temporal variations in fruit production of oak trees (masting) and their effect on the populations of acorn consumers <i>Samuel Venner (Université Lyon 1, Laboratoire de Biométrie et Biologie Evolutive)</i>
17:15 - 17:45	Overall discussion
17:45 - 18:45	Poster session

Friday 13 October 2017

Session 7 : Monitoring forests at pan-European level

8:30 - 8:45	Opening of the session by the chairman <i>Marco Ferretti (WSL Zurich, Chairman of ICP Forests)</i>
8:45 - 9:05	ICP Forests' long experience in quality control and improvement, for monitoring forest in a comparable way <i>Nils König (Northwest German Forest Research Station, Head of environmental analytics)</i>
9:05 - 9:25	Tree mineral nutrition has been deteriorating: that was confirmed at the European scale <i>Mathieu Jonard (Université catholique de Louvain, Earth and Life Institute)</i>
9:25 - 9:45	What is the threat of ozone pollution to the forest? First monitoring results reveal a decrease of ozone concentrations at the European scale <i>Marcus Schaub (WSL Zurich, Ecophysiology)</i>
9:45 - 10:15	Overall discussion

10:15 - 10:45 Coffee break

Session 8 : What could be the future perspectives for monitoring forests?

10:45 - 10:55	Opening of the session by the chairman <i>Guy Landmann (GIP ECOFOR, Chairman of the Scientific board of the RENECOFOR network)</i>
10:55 - 11:45	Which way should the existing monitoring networks adapt or develop? - <i>Frédéric Delpont (MAA, Head of the Forest Health Department)</i> - <i>Jean-Daniel Bontemps ? (IGN, National forest inventory)</i> - <i>Laurent Saint-André (INRA, F-ORE-T environmental research monitoring and experimentation system)</i> - <i>Marco Ferretti (WSL Zurich, Chairman of ICP Forests)</i> - <i>Manuel Nicolas (ONF, Head of the RENECOFOR network)</i>
11:45 - 12:30	Overall discussion
12:30 - 13:00	Synthesis and closing remarks

13:00 - 14:30 Lunch