



LIFE FOR EUROPEAN FOREST GENETIC MONITORING SYSTEM

LIFEGENMON Newsletter IUFRO 2019

1. LIFEGENMON in brief:

LIFEGENMON – LIFE for European Forest Genetic Monitoring System.

An early warning system to aid the assessment of a species response to environmental changes on a long-term temporal scale

The project combines the efforts of 6 partners from 3 countries (Germany, Greece and Slovenia), coordinated by the Slovenian Forestry Institute.

It lasts from July 2014 until June 2020 with a total budget of €5,484,162.

The project is financially supported by the European Union's LIFE financial mechanism.

Current activities: implementation (see picture), monitoring, dissemination, management



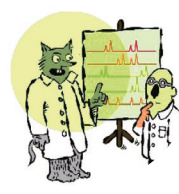
DESIGN



FIELD



LAB



ANALYSIS



REPEAT



COMPARE

Drawings by Domen Finžgar

2. LIFEGENMON at IUFRO 2019

Subplenary

5 Oct 2019, 14:00 - 15:00: B2a: Trees on the move: range shifts, potential for genetic adaptation and assisted migration

Chair: Marjana Westergren, Paraskevi Alizoti, Barbara Fussi, Hojka Kraigher.

Congress Theme: B. Forests and Climate Change

Climate change is challenging forest tree species, populations and their genetic diversity, forcing them to adapt, migrate or extirpate. Geographically or altitudinally marginal populations are of special interest as they may differ genetically, due to natural selection and genetic drift acting together in cases of low population size and isolation, and harbour unique genes for specific adaptations. The session will explore the progress and promises of forest genetics research to assess the genetic variation of marginal populations, their gene pool changes over time, and their extirpation probability, in order to reach the most suitable decisions for their conservation and management.



Technical sections

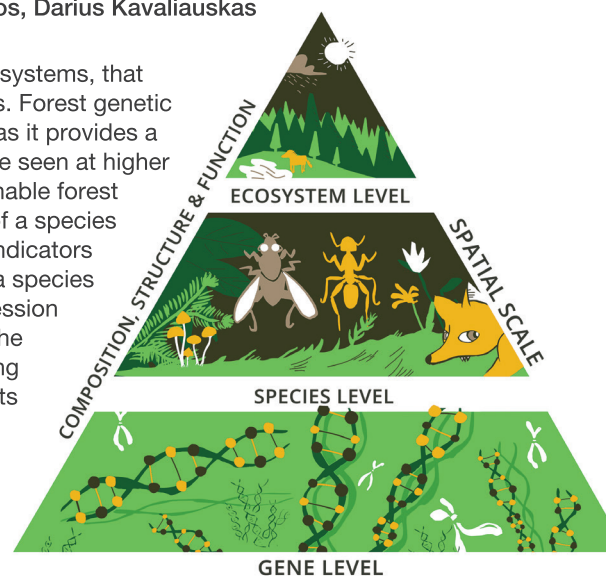
2 Oct 2019, 8.30 – 10.30: B1e: Trees on the move: seed sourcing, germination, genetic adaptation and assisted migration in a changing climate

Chair: Marjana Westergren, Elisa Serra Negra Vieira, Paraskevi Alizoti, Barbara Fussi, Hojka Kraigher.
Congress Theme: B. Forests and Climate Change

4 Oct 2019, 8:30-10:30: D2a: Applied genetics for forest management and conservation

Chairs: Hojka Kraigher, Saša Orlović, Marjana Westergren, Fillippos Aravanopoulos, Darius Kavaliauskas
Congress Theme: D. Biodiversity, Ecosystem Services and Biological Invasions

Sustainable forest management is based on the long-term adaptability of forest ecosystems, that largely depend on biodiversity, which starts at the lowest level, namely that of genes. Forest genetic monitoring is therefore a crucial component of any sustainable forest management as it provides a possibility to detect potentially harmful changes to forest adaptability before they are seen at higher levels. By introducing genetic monitoring into conservation programmes and sustainable forest management one has the tools in hand to assess information on relevant changes of a species and/or populations' adaptive and neutral genetic variation through time. Based on indicators and their verifiers it can serve as an early warning system to aid the assessment to a species response to environmental change on a long-term temporal scale. The aim of the session is to present the development of a system for forest genetic monitoring to support the long-term maintenance of the adaptability of forest genetic resources to the changing environment. The background is based on a European implementation project and its outputs: i) the Manual for Forest Genetic Monitoring for practical implementation; ii) the Decision Support System for an optimal choice of the level of Forest Genetic Monitoring based on needs and means; iii) and the science policy communication action plan for adopting the forest genetic monitoring system into national legislation and international strategies. Therefore, the action will compile presentations on forest genetic monitoring, FRM certification, breeding, and the use of genetic information for forest management and dissemination with practical examples. The presentations combine 5 oral lectures of 12 minutes + 3 minutes of discussion and 8 brief presentations of 3 minutes + 2 minutes discussion time.



Drawing by Domen Finžgar

Other

D7q: Mistletoes and Forest Health

1 Oct 2019, 12:30 - 13:30

Ectomycorrhizal community composition changes along to silver fir (*Abies alba* Mill.) phenological stages in Slovenia
Tina Unuk, Domen Finžgar, Rok Damjanić, Tine Grebenc, Hojka Kraigher
Slovenian Forestry Institute, Ljubljana, Slovenia.

B4r: Assessing Climate Change Impacts on Forests

4 Oct 2019, 12:30 - 13:30

Phenologically contrasting silver fir (*Abies alba* Mill.) groups and belowground root-associated fungal communities in Slovenia
Tina Unuk, Tijana Martinović, Domen Finžgar, Rok Damjanić, Nataša Šibanc, Tine Grebenc, Hojka Kraigher

1. Slovenian Forestry Institute, Ljubljana, Slovenia.
2. Institute of Microbiology of the CAS, Prague, Czech Republic.

F6q: Forestry Education

2 Oct 2019, 12:30 - 13:30

The Forest of Experiments – promoting forestry science in Slovenia

There are many ways to learn more about our project and meet people that are part of it. Visit our project website www.lifegenmon.si and project portal www.znanjezagozd.si. For quality content, project news, getting in contact with project partners, and more please follow our social profiles:

 www.facebook.com/lifegenmon

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GOZDARSKI INŠTITUT SLOVENIJE
SLOVENIAN FORESTRY INSTITUTE

SLOVENIA (coordinating beneficiary)
www.gozdis.si



ZAVOD za GOZDOVE
SLOVENIJE

Slovenia Forest Service
www.zgs.si



CIVOS
Centre for Information Service,
Co-operation and Development of NGOs

Centre for Information Service,
Co-operation and Development of NGOs
www.civos.si



GREECE
Decentralized Administration of
Macedonia & Thrace
General Directorate of Forests &
Rural Affairs
www.damt.gov.gr



Aristotle University of
Thessaloniki, Faculty
of Forestry and
Natural Environment
www.for.auth.gr



AWG Bayerisches Amt für
Waldgenetik
GERMANY
Bavarian Office for Forest Genetics
www.awg.bayern.de



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