# Integrated Management of Environmental Resources



Suceava, November 23-24 2023

# Conference agenda

#### November 23th, 2023 - Thursday

Joseph Smith Auditorium of the "Stefan cel Mare" University:

9.00 – 9.30 Registration of the participants

9.30- 10.30 Welcome speech

10.30 - 12.00 Key note presentations

Building E - "Stefan cel Mare" University

12.00-13.00 Lunch – first floor Room E110

13.00-17.00 Panel sessions - see detailed program for each session

17.00 - 18.00 Poster session – ground floor building E

**Hotel Balada** 

19.00 Conference dinner

#### November 24th, 2023 - Friday

9.00-14.00 Field trip to Slatioara old-growth forest UNESCO site

## **Conference Program**

#### November 23th, 2023 - Thursday

#### Opening session - Joseph Smith Auditorium of the "Stefan cel Mare" University

09.30-10.30 Ciprian Palaghianu, Forestry Faculty, "Ştefan cel Mare" University of Suceava, Romania

Valentin Popa, Ștefan cel Mare" University of Suceava, Romania

Lucian Curtu, Faculty of Silviculture and Forest Engineering, "Transilvania" University of Braşov, Romania

Serban Davidescu, National Institute of Research - Development in Forestry "Marin Dracea", Romania

Dumitru Galupa, National Forest Research Institute, Republic of Moldova

Alina Elena Cuciureanu, Bucovina Forestry High-School, Romania

Gabriel Oltean, Ministry of Environment, Water and Forests, Romania

Vasile Rusu, National Forest Administration RNP-Romsilva, Romania

Victor Sfeclă, Technical University of Moldova, Republic of Moldova

Mihai Enescu, University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania

Valerian Solovăstru, National Forest Administration Suceava, Romania

Mihai Gășpărel, Forest Inspectorate Suceava, Romania

Valentin Năstăsescu, Silva Federation, Romania

#### Plenary session - Joseph Smith Auditorium of the "Stefan cel Mare" University

10.30-10.55	The response of the common oak (Quercus	Popa Ionel <sup>1,2</sup> , Popa Andrei <sup>1,3</sup> , Balabasciuc Mihai <sup>1</sup>
	robur) and the grayish oak (Quercus	1 National Institute for Research and Development in
	pedunculiflora) to climate in the forest-	Forestry 'Marin Dracea', Bucharest, Romania
steppe area of southeastern Romania	2 Center for Mountain Economy (CE-MONT), Vatra Dornei,	
	Romania	

3 Faculty of Silviculture and Forest Engineering, Transilvania University of Brasov, Brasov, Romania

10.55-11.20 Socioecological Dynamics and Forest
Dependent Communities' Wellbeing: The
Case of Yasuní National Park, Ecuador

Isabel Domingues<sup>1</sup>, Coman Claudiu<sup>2</sup>, Popa Bogdan<sup>1</sup>

1Faculty of Silviculture and Forest Engineering, 2. Faculty of Sociology and Communication, "Transilvania" University of Brașov, Romania

11.20-11.45 Aspects regarding the contribution of the National Forest Extension and Rehabilitation Program to the sustainable development of the Republic of Moldova

Dumitru Galupa, Talmaci Ion, Florenta Gheorghe National Forest Research Institute , Republic of Moldova

11.45-12.00 Conclusions

12.00-13.00 Lunch break - Building E - "Stefan cel Mare" University, room E110

Session: Environmental Economics and Policy Room: E 105 Moderator: Laura Bouriaud 13.00-13.15 The music of wood - the connection between Mariana Domnica Stanciu<sup>1</sup>, Florin Dinulica<sup>2</sup>, Vasile Ghiorghe Gliga<sup>1,3</sup>, Mihaela Campean<sup>4</sup>, Adriana the forest ecosystem, the manufacturing technology and art Savin<sup>1,5</sup>, Silviu Marian Nastac<sup>1,6</sup>, Alina Marian Nauncef<sup>7</sup> 1 Department of Mechanical Engineering, Transilvania University of Brasov 2 Department of Forest Engineering, Forest Management Planning and Terrestrial Measurements, Transilvania University of Brașov, 3 S.C. Gliga Musical Instruments S.A., Reghin, Romania; 4 Faculty of Furniture Design and Wood Engineering, Transilvania University of Brasov. 5 Institute of Research and Development for Technical Physics, 6 Faculty of Engineering and Agronomy, Braila, "Dunarea de Jos" University of Galati, Romania, 7 Faculty of Music, Transilvania University of Brașov 13.15-13.30 Promoting renewable energies as a tool for Alexandra Smalberger, Anca Măciucă "Ştefan cel Mare" University of Suceava, Forestry Faculty, Romania climate change mitigation; case studies solar energy for the cities of Leeuwarden (Netherlands) and Suceava (Romania) 13.30-13.45 Dimensional characteristics of wood chips Cezar Scriba, Elena Camelia Musat\* Transilvania University of Brasov - Faculty of Silviculture and Forest and their moisture content for short-rotation Engineering, Romania crops of energy willow Determination of the potential social and 13.45-14.00 Cerasela Teodorescu "Ştefan cel Mare" University of Suceava, Forestry Faculty, Suceava, biomass production impact of forestry works Romania adjacent to the Via Transilvanica route 14.00-14.15 Critical Analysis of Payments for Ecosystem Ibrahim Osewe, Aureliu-Florin Hălălișan, Nicolae Services: Case Studies in Kenya, Uganda and Talpă, Bogdan Popa Transilvania University of Brasov - Faculty of Silviculture and Forest Tanzania Engineering, Romania 14.15-14.30 Analysis of the first-year students of the Catalina Oana Barbu. Liviu Nichiforel, Sergiu Andrei Horodnic Forestry Faculty perceptions concerning the "Ştefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romanian forests management Romania 14.30-14.45 The Romania Forest legislation seen as a Marian Dragoi<sup>1</sup>, Dragos Costin<sup>1</sup>, Veronica Toza<sup>2</sup>, Vasile Iosifescu<sup>1</sup>, Petru Drob<sup>2</sup> și Gabriel Dănilă<sup>1</sup> Javon's Paradox 1 "Ştefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania 2 Legal consultant Liviu Nichiforel<sup>1</sup>, Valeriu-Norocel Nicolescu<sup>2</sup> 14.45-15.00 Forest laws analysis in selected European 1"Ştefan cel Mare" University of Suceava, Forestry Faculty, Suceava, countries

15.00-15.30 Coffee break

Romania

Engineering, Romania

2 Transilvania University of Brasov - Faculty of Silviculture and Forest

Session: Environmental Economics and Policy Room: E 105 Moderator: Laura Bouriaud 15.30-15.45 PEFC - Standards for Sustainable Forest Lucian Filigean **PEFC Romania** Management 15.45-16.00 Perceptions of stakeholders input for FSC Bogdan Buliga<sup>1</sup>, Liviu Nichiforel<sup>2</sup> 1Preferred by Nature forest management certification from 2 "Ştefan cel Mare" University of Suceava, Forestry Faculty, Romania Romania 16.00-16.15 A new metric to assess the deadwood Ciprian Ceornea "Ştefan cel Mare" University of Suceava, Forestry Faculty, Suceava, presence in FSC certified forests Romania 16.15-16.30 Understanding the EU Deforestation Tudor Serban, Bogdan Buliga Regulation - Resources and tools for **Preferred by Nature** implementation 16.30-16.45 The role of cultural ecosystem services for Ramona Scriban, Marian Drăgoi, Carmen Badaluta "Ştefan cel Mare" University of Suceava, Forestry Faculty, Suceava, sustainable forest management Romania 16.45-17.00 Analizing the possibility to RfiD utilisation Pălie Dorin, Laura Bouriaud "Ştefan cel Mare" University of Suceava, Forestry Faculty, Suceava, in forestry in Romania Romania

Session: Forest Ecosystems and Climate Room: E113

Moderator: Gabriel Duduman

13.00-13.15	Deadwood carbon dynamics over 10-years in a temperate virgin forest	Ion Cătălin Petrițan Transilvania University of Brasov, Romania
13.15-13.30	Mapping vegetation in the protection areas of the high voltage power lines for Ecological corridor Management	Ionut Barnoaiea <sup>1</sup> , Ciprian Palaghianu <sup>1</sup> , Ovidiu Iacobescu <sup>1</sup> , Alina Dobresanciuc <sup>2</sup> , Gabriel Duduman <sup>1</sup> , Cezar Tomescu <sup>1</sup> , Alexei Savin <sup>1</sup> , Vasile-Cosmin Cosofret <sup>1</sup> , Daniel Avacaritei <sup>1</sup> , Iulian Danila <sup>1</sup> , Georgel Mazare <sup>1</sup> , Florin Clinovschi <sup>1</sup> , Corneliu Pohontu <sup>1</sup> , Gabriel Danila <sup>1</sup> , Paul Iliescu <sup>1</sup> 1. "Ştefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania, 2. Delgaz Grid S.A., Romania
13.30-13.45	Results of vegetation and fauna mapping in Şipote Forest, Suceava municipality	Gabriel Duduman, Cezar Tomescu, Anca Măciucă, Ionuț Barnoaiea, Ovidiu Iacobescu, Mihai-Leonard Duduman "Ștefan cel Mare" University of Suceava, Forestry Faculty, Romania
13.45-14.00	Mapping historically disturbed forest structure using LiDAR and spy sattelites in Pecineagu watershed	Ioana Alexandra Nicolae, Mihai Daniel Niță Transilvania University of Brasov, Romania
14.00-14.15	Comparing the efficiency of forest mitigation strategies on carbon sequestration	Cosmin Cosofret, Olivier Bouriaud, Laura Bouriaud "Ştefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania
14.15-14.30	Use of terrestrial laser scanner (TLS) to optimize tree sampling for allometric model fitting in short-rotation woody crops (SRWCs)	Iulian Dănilă, Cosmin Coșofreț, Olivier Bouriaud "Ștefan cel Mare" University of Suceava, Forestry Faculty, Romania
14.30-14.45	Wood density in Norway Spruce ( <i>Picea abies</i> (L.) H. Karst) stand installed using different planting schemes in the north of the Eastern Carpathians	Gheorghe Ştefan <sup>1,2</sup> , Răzvan Vasile Câmpu <sup>3</sup> , Radu Vlad <sup>2</sup> , Alexandra Ispravnic (Ştefan) <sup>1,2</sup> 1. Interdisciplinary Doctoral School, "Transylvania" University from Brasov, Romania 2. National Institute for Research and Development in Forestry 'Marin Dracea', Campulung Moldovenesc, Romania 3. Department of Forest Engineering, Forest Manangement Planning and Terrestrial Measurements, Faculty of Silviculture and Forest Engineering, Transilvania University of Brasov, Romania
14.45-15.00	Growth and development indices at stand level in mixed Norway spruce ( <i>Picea abies</i> (L.) H. Karst) silver fir ( <i>Abies alba</i> Mill.) and beech ( <i>Fagus sylvatica</i> L.) stands from the north of the Eastern Carpathians	Alexandra Ispravnic (Stefan) <sup>1,2</sup> Razvan Vasile Câmpu <sup>3</sup> , Radu Vlad <sup>2</sup> , Gheorghe Stefan <sup>1,2</sup> 1 Interdisciplinary Doctoral School, Transilvania University of Braşov,Romania 2 National Institute for Research and Development in Forestry "Marin Drăcea" Câmpulung Moldovenesc Research Station, Romania 3 Department of Forest Engineering, Forest Manangement Planning and Terrestrial Measurements,Faculty of Silviculture and Forest Engineering , Transilvania University of Brasov,Romania

15.00-15.30 Coffee break

Moderator: Gabriel Duduman 15.30-15.45 A systematic survey of conventional and new Gabriel Osei Forkuo Department of Forest Engineering, Forest Management Planning and postural assessment methods Terrestrial Measurements, Faculty of Silviculture and Forest Engineering, Transilvania University of Braşov, Romania 15.45-16.00 Patterns of forest species association in Ciprian Palaghianu, Cosmin Cosofret "Ştefan cel Mare" University of Suceava, Forestry Faculty, Suceava, sapling communities: a story of love and hate **Georgel Constantin Mazare** 16.00-16.15 Weeding of seedlings in forest nurseries by "Ştefan cel Mare" University of Suceava, Forestry Faculty, Suceava, chemical method - case study Romania 16.15-16.30 The specifics of the growth of beech Victor Sfeclă, Alexandru Chetrean, Irina Sfeclă Technical University of Moldova, Faculty of Agricultural, Forest and seedlings (Fagus Sylvatica L.) of different Environmental Sciences, Chisinău, Republic of Moldova geographic proveniences in the "Plaiul Fagului" scientific reserve 16.30-16.45 Analysing the sound speed through the wood Gheorghe Pei<sup>1</sup>, Radu Vlad<sup>2</sup> 1.Transilvania University of Brașov, Faculty of Silviculture and Forest and stability of Norway spruce trees affected Engineering, Romania by trunk rot 2.National Institute for Research and Development in Forestry (INCDS) "Marin Drăcea" - Câmpulung Moldovenesc, Romania 16.45- 17.00 The viability of beech seedlings of different Victor Sfeclă<sup>1</sup>, Irina Sfeclă<sup>1</sup>, Nina Zdioruk<sup>2</sup>, Nicolae geographic proveniences (Fagus sylvatica L.) Platovschii<sup>2</sup> 1Technical University of Moldova, Faculty of Agricultural, Forest and in the conditions of the "Plaiul Fagului" Environmental Sciences, Chişinău, Republic of Moldova scientific reserve 2Institute of Genetics, Physiology and Plant Protection of SUM, Chisinau, Republic of Moldova

Room: E113

Session: Forest Ecosystems and Climate

Session: Forest Assessment, Modelling, Forest Management Room: E109

Moderator: Cătălin Constantin Roibu

13.00-13.15	Exploring the effect of long-term natural disturbance dynamics on contemporary lichen communities	Rhiannon Gloor <sup>1</sup> , Marek Svitok <sup>2</sup> , Martin Mikoláš <sup>1,3</sup> , Jeňýk Hofmeister <sup>1</sup> , Ondřej Vostárek <sup>1</sup> , Daniel Kozák <sup>1</sup> , Lucie Zemanová <sup>1</sup> , Miroslav Svoboda <sup>1</sup> 1Department of Forest Ecology, Faculty of Forestry and Wood Sciences, Czech University of Life Sciences Prague, Praha 6 – Suchdol, Czech Republic 2Faculty of Ecology and Environmental Sciences, Technical University in Zvolen, Slovakia 3PRALES, Odtrnovie 563, 013 22 Rosina, Slovakia
13.15-13.30	Particularities in beech and oak responses to climate at the easternmost sites of their distribution in Europe.	Catalin-Constantin Roibu <sup>1</sup> , Andrei Mursa <sup>1</sup> , Ciprian Palaghianu <sup>1</sup> , Marian-Ionut Stirbu <sup>1</sup> , Mihai Gabriel Cotos <sup>1</sup> , Cosmin Andriescu <sup>1</sup> , Ana-Maria Cretan <sup>2</sup> , Victor Sfecla <sup>1,3</sup> (1) Forest Biometrics Laboratory- Faculty of Forestry, "Stefan cel Mare" University of Suceava, Romania (2) Transilvania University of Brasov, Romania (3) Technical University of Moldova, Republic of Moldova
13.30-13.45	Outstanding structural attributes of primary spruce forests shape regional species distribution of various taxa	Matej Ferenčík  Czech University of Life Sciences Prague, Faculty of Forestry and  Wood Sciences, Department of Forest Ecology, Czech Republic
13.45-14.00	Optimal distribution of sample trees in developing allometric biomass models	Ioan Dutca 1.Transilvania University of Brasov, Romania; 2.Buckinghamshire New University
14.00-14.15	The vulnerability of some juvenile fir provenances ( <i>Abies alba</i> Mill.) to damage caused by late frosts, evidenced by frost rings	Anca Botezatu, Anca-Ionela Semeniuc Fecioru, Maria Teodosiu National Institute for Research and Development in Forestry" Marin Drăcea" Câmpulung Moldovenesc, Romania
14.15-14.30	Maple resonance wood: structural and acoustic requirements	Florin Dinulică <sup>1</sup> , Mariana Domnica Stanciu <sup>1</sup> , Cătălin Constantin Roibu <sup>2</sup> , Cristian Hiciu <sup>1</sup> , Daniel Constantin Şandor <sup>1</sup> , Marian Ştirbu <sup>2</sup> , Andrei Mursa <sup>2</sup> 1Transilvania University of Brasov, Romania, 2"Ștefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania
14.30-14.45	Deadwood and saproxylic beetles in the Sinca Old-Growth Forest	Gabriela Isaia <sup>1</sup> , Mihai-Leonard Duduman <sup>2</sup> , Ionuţ-Marian Dragomir <sup>1</sup> , Ion Cătălin Petriţan <sup>1</sup> 1Transilvania University of Brasov, Faculty of Silviculture and Forest Engineering, Romania 2"Ştefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania
14.45-15.00	Bark and wood boring beetles in relation with the new episodes of oak decline in North-East of Romania	Daniela Lupaștean <sup>1</sup> , Constantin Ciornei <sup>2</sup> , Florin Botezatu <sup>3</sup> , Mihai-Leonard Duduman <sup>1</sup> 1"Ștefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania, 2independent researcher, 3Ingka Investments Forest District, Romania
15.00-15.30	Coffee break	

Session: Forest Assessment, Modelling, Forest Management Room: E109

Moderator: Cătălin Constantin Roibu

15.30-15.45	Leaf morphological traits distinguish between Cuban native species of mahagoni and the Hondurian mahagony.	Liuder Isidoro Rodríguez Coca, Elena Ciocirlan, Alexandru Lucian Curtu Faculty of Silviculture and Forest Engineering, Transilvania University of Brasov, Romania
15.45-16.00	Comparison between atmospheric depositions recorded at the Rarau experimental plot at different altitudes	Amelia Buculei <sup>1</sup> , Carmen Iacoban <sup>1</sup> , Ștefan Leca <sup>2</sup> 1. National Institute for Research and Development in Forestry" Marin Drăcea", Câmpulung Moldovenesc, 2. National Institute for Research and Development in Forestry" Marin Drăcea", Voluntari, România
16.00-16.15	Effects of industrial activity and air pollution on European beech trees in Transylvania, Romania	Cosmin Ilie Cuciurean <sup>1,2</sup> , Cristian Gheorghe Sidor <sup>1</sup> , Ionel Popa <sup>1,3</sup> (1) National Research and Development Institute in Forestry "Marin Drăcea", Romania, (2) Doctoral School of Engineering Sciences, "Ștefan cel Mare" University from Suceava, Romania, (3) Center of Mountain Economy -INCE - CE-MONT Vatra Dornei, Romania
16.15-16.30	Co-exposure effects of polypropilene and ketoprofen treatments on zebrafish behavior	Ionuţ-Alexandru Chelaru <sup>1,2</sup> , Alexandra Savucă <sup>1,2</sup> , Alin Stelian Ciobîcă <sup>3,4,5</sup> , Dorel Ureche <sup>6</sup> , Mircea Nicuṣor Nicoară <sup>1,3</sup> 1 Doctoral School of Geosciences, Faculty of Geography and Geology, "Alexandru Ioan Cuza" University of Iaṣi, 2 Doctoral School of Biology, Faculty of Biology, "Alexandru Ioan Cuza" University of Iaṣi, 3 Department of Biology, Faculty of Biology, "Alexandru Ioan Cuza" University of Iaṣi, 4 Academy of Romanian Scientists 5 Center of Biomedical Research, Romanian Academy, Iaṣi, 6 Faculty of Sciences, Department of Biology, Ecology and Environmental Protection, University "Vasile Alecsandri", Bacau, Romania
16.30- 16.45	The study of the evolution of natural regeneration in the territories located outside the Adancata forest area	Savin Alexei, Voloșciuc Florentin-Nicolae, Cucu Cornel-Constantin "Ștefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania
16.45- 17.00	The structure of the forest fund of the Străseni Silvocinegetic Enterprise depending on the natural conditions	Grati Vladislav <sup>1,2</sup> , Bunduc Tatiana <sup>3</sup> , Bejan lurie <sup>3</sup> , 1.Moldova State University, 2.Faculty of Forestry, "Stefan cel Mare" University of Suceava, 3. Moldova State University, Institute of Ecology and Geography
17.00-17.15	Comparative analysis of altitude accuracy for forest roads, using methods based on total stations and lidar	Bogdan Popovici "Ştefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania

## Poster Session 17.00-18.30 Lobby E – Building

## Moderator: Mihai-Leonard Duduman

5 min	Freshwater Fish Communities As An Indicator Of Pesticide Pollution	Corneliu Mihaita Pohontu Stefan cel Mare University of Suceava, Romania
5 min	Results-based payments in the agricultural sector, with the possibility of application in the forestry sector	Teodorescu Cerasela Ştefan cel Mare University of Suceava, Romania
5 min	Ichthyofauna from the Casin river basin in 2023	Teodora-Ramona Popa, Camelia Ureche, Dorel Ureche Universitatea "Vasile Alecsandri" din Bacău, Romania
5 min	The study of the interaction between environmental policy and forestry policy with applicability to protected natural areas	Mariana Croitor Ștefan cel Mare University of Suceava, Romania
5 min	Forestry 4.0: How is the fourth technological advancement affecting the forestry sector?	Iulian Dănilă, Ciprian Palaghianu Ștefan cel Mare University of Suceava, Romania
5 min	The response of larch seedlings from different Romanian provenances to low temperatures	Alina M. Truţa¹, Iulia Arion¹, Irina M. Morar¹*, Steluta M. Sîngeorzan1, Catalina Dan², Roxana D. Stoian-Dod², Liviu Holonec¹  1 University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Faculty of Forestry and Cadastre, Romania; 2 University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Faculty of Horticulture and Business in Rural Development, Romania;
5 min	Analysis of the main characteristics and germination capacity of fir seeds under various abiotic stress conditions	Irina M. Morar <sup>1</sup> , Alina M. Truta <sup>1*</sup> , Roxana D. Stoian- Dod <sup>2</sup> , Catalina Dan <sup>2</sup> 1 University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Faculty of Forestry and Cadastre, Romania; 2 University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Faculty of Horticulture and Business in Rural Development, Romania
5 min	The effect of rewilding of beech-dominated temperate forest ecosystems on carbon stocks and biodiversity indicators	Markuljaková K., Kozák D., Mikoláš M., Ferenčík M., Frankovič M., Dúhová D., Svoboda M. Faculty of Forestry and Wood Sciences, Czech University of Life Sciences Prague, Kamýcká 129, 165 21 Praha 6 – Suchdol, Czech Republic
5 min	Evaluation and monitoring of comparative trials of half-sib provenances of beech ( <i>Fagus sylvatica</i> L.) installed in two forest districts Demacusa and Vidra	Alina Todirică, Maria Teodosiu, Cristiana Ciuvăț, Ecaterina Apostol National Institute for Research and Development in Forestry "Marin Drăcea", Romania
5 min	Survey's and questionnaires for forestry research.  Tools for the present.	Andrei Apăfăian <sup>1</sup> , Cristian Mihai Enescu <sup>2</sup> , Vlad Crișan <sup>1</sup> 1"Marin Drăcea" National Institute for Research and Development in Forestry, Brașov, Romania, 2 Department of Soil Sciences, University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania
5 min	Phytosanitary status of pedunculate oak crops in Voivodeni forest nursery, Reghin Forestry District, Mureș County Forest Administration, in the period 2021-2023	Mircea Ioan Varga1, Ioan Tăut1,2*, Florin Alexandru Rebrean1, Mircea Moldovan2, 1University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca Faculty of Forestry and Land Surveying, 2"Marin Drăcea" National Institute for Research and Development in Forestry Cluj, Romania
5 min	Empirical Procedure For Estimating The Effect On The Peak Discharge Of Torrent Control Works	Ioan Ciornei Ștefan cel Mare University of Suceava, Romania

5 min	Floristic notes of the "Dobruşa" landscape reserve of the Republic of Moldova	Victor Sfeclă <sup>1</sup> , Pavel Pînzaru <sup>2</sup> 1 State University of Moldova, Chişinău, Republic of Moldova, 2 "Alexandru Ciubotaru" National Botanical Garden (Institute), SUM, Chişinău, Republic of Moldova
5 min	Aspects regarding the identification of forest genetic resources of cvercines in the North area of the Republic of Moldova	Gheorghe Florență <sup>2,1</sup> , Valeriu Caisîn <sup>3,1</sup> , Aliona Miron <sup>1</sup> , Veronica Florență <sup>2,1</sup> 1 National Botanical Garden (Institute) "Alexandru Ciubotaru" of the State University of Moldova 2 Forest Research and Management Institute, Chisinau, Republic of Moldova 3 Agency "Moldsilva"
5 min	Issues of assessing carbon stocks in the biomass and soil of grasslands in Orhei National Park	Ion Talmaci <sup>1,2</sup> , Aliona Miron <sup>1</sup> , Alexandru Galupa <sup>1,2</sup> , Erii Prosii <sup>1,2</sup> , Ghenadie Cojocaru <sup>1,2</sup> , Ala Mardari <sup>1,2</sup> , Ludmila Talmaci <sup>1</sup> 1Grădina Botanică Națională (Institut) "Alexandru Ciubotaru" a Universității de Stat din Moldova 2Institutul de Cercetări și Amenajări Silvice
5 min	Aspects regarding the estimation of carbon from the biomass of forest trees in the Southern Area of the Republic of Moldova	Ion Talmaci <sup>1,2</sup> , Erii Prosii <sup>1,2</sup> , Alexandru Galupa <sup>1,2</sup> , Ghenadie Cojocaru <sup>1,2</sup> , Ala Mardari <sup>1,2</sup> , Aliona Miron <sup>1</sup> , Ludmila Talmaci <sup>1</sup> , Alexandru Varzari <sup>1,2</sup> 1Grădina Botanică Națională (Institut) "Alexandru Ciubotaru" a Universității de Stat din Moldova 2Institutul de Cercetări și Amenajări Silvice
5 min	Species <i>Orchis Purpurea</i> HUDS. in the grasslands of the Orhei National Park	Aliona Miron <sup>1</sup> , Alexandru Galupa <sup>1,2</sup> , Ghenadie Cojocaru <sup>1,2</sup> 1"Alexandru Ciubotaru" National Botanical Garden (Institute) of the State University of Moldova, Chisinau, Republic of Moldova 2Forest Research and Management Institute, Chisinau, Republic of Moldova