



8TH INTERNATIONAL **WILDLAND FIRE CONFERENCE**

GOVERNANCE PRINCIPLES:

Towards an International
Framework

May 16-19th | 2023

Porto - Portugal

PROGRAM

2023



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WELCOME MESSAGE

Welcome to the 8th International Wildland Fire Conference

Responding to the severe and globally widespread wildland fires seasons of the 1980's, representatives of government entities and private institutions of all continents organized, in Boston, USA, the 1st International Wildland Fire Conference – “Meeting Global Wildland Fire Challenges”.

Near the turn of the century, the 2nd conference was hosted in Vancouver, Canada, dedicated to “Wildland Fire and Sustainable Development”, attended participants from 38 countries. Since then, every 4 years, a growing community gets together on a different continent to learn from each other and share knowledge and expertise under the scope of integrated fire management.

Prior conferences helped organizations and professionals from more than 70 nations to develop a common fire lexicon, doctrines, training manuals, techniques, and operational standards. We excelled on preventing, detecting, and extinguishing wildland fires, mastering a portfolio of technological solutions.

Through time, the political and physical systems that we are part of, tackled mostly the consequences (suppressing fire) instead of addressing the root causes (human activity and how it uses the land). The reinforcement of suppression, without investing in fuel management, is a quick fix, that escalates the problem to a higher level. This firefighting trap or Fire Paradox, in a global warmer and drier environment, is exposing different biotas and communities to severe fires, wildfires, bushfires, forest, vegetation, landscape and rural fires as they are named from north to south, west to east.



In the last decade, extreme fire events destroyed lives, buildings and natural habitats, cornering and puzzling politicians, institutional leaderships, and professionals. In 2017, wildfires tragically challenged Portuguese society. Since then, all our efforts converged into integrated fire management this is no longer a niche or a subject for a few wildland firefighters or landscape planners. You can follow our successes and opportunities ahead at www.agif.pt

It is all about reaching out to other communities of practice, economic sectors, local and indigenous people. As fire management becomes a complex socio-ecological issue, it demands robust institutions, transparent and accountable procedures, and permanent communication with key stakeholders. It also demands a balanced budget between fuel treatment and suppression, in a set of cohesive policies. This means dismantling a culture of silos, promoting inter-departmental dialogue, avoiding unintended consequences from cross cutting public policies (agriculture, forestry, energy, development, environment, fiscal and others. In Portugal, we are also aiming at engaging different audiences, at different geographies and levels of authority and have their commitment, prevailing in time.

Following-up the recommendations of the 7th International Wildland Fire Conference, which was hosted by Brazil in 2019 and addressed the theme “Facing Fire in a Changing World: Reducing Vulnerability of People and Landscapes by Integrated Fire Management”, we are now challenged to put words into action.

Better wildland fire governance is needed to protect biodiversity, foster carbon sequestration and healthy forests and assure they are providing goods and services that do not vanish in wildfire smoke.

As Chairman and on behalf of the Organizing Committee of the 8th International Wildland Fire Conference we invite you to come to Portugal with your knowledge, insights, and thoughts. We welcome you to contribute with your institutional or professional case study, your scientific work or your operational success or failure in tackling complexity and uncertainty when governing or managing wildfire risk. More than 1200 participants, arriving from more than 80 countries are expected to be at Porto.

We worked hard to welcome you as best as we have imagined. At Porto, we wish you to have a lifetime influencing professional experience, through the opportunity to meet with thousands of people coming from all over the world. We all share similar problems and are deeply committed to work on the solutions.

We will be honoured to host you at Porto, to listen to your relevant contribution in every thematic sessions and in oral, poster or workshop, discussion and participating in the Landscape Fire Governance Framework.

We believe that your piece of the puzzle will matter to help your nation and all nations to be better prepared to deal with the challenges ahead of us and to build fire-resilient landscape and societies.

TIAGO MARTINS DE OLIVEIRA

Chair of 8th IWFC Organizing Committee and Chairman of AGIF Board of Directors

ORGANIZATION

LOCAL ORGANIZER OF THE 8th IWFC



INTERNATIONAL LIAISON COMMITTEE FOR THE 8th IWFC



UNDER THE HIGH PATRONAGE OF THE PRESIDENT OF THE PORTUGUESE REPUBLIC

COM O ALTO PATROCÍNIO
DE SUA EXCELENCIA
UNDER THE HIGH PATRONAGE OF THE
PRESIDENT OF THE PORTUGUESE REPUBLIC



O Presidente da República

HONOR COMMITTEE

Marcelo Rebelo de Sousa

President of the Portuguese Republic - Chairman of the Honor Committee

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- **Duarte Cordeiro**, Minister of Environment and Climate Adaptation, PT
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- **Alexandre Quintanilha**, Member Parliament - President of Committee of Science and Education, PT
- **Luísa Salgueiro**, President of National Associations of Portuguese Municipalities, PT
- **Rui Moreira**, Mayor of Porto, PT
- **António Cunha**, President of the CCDR Norte, PT
- **Duarte Santos**, President of the National Council of Sustainable Development (CNADS), PT
- **Francisco Castro Rego**, Coordinator of the Fire Ecology and Management Research Area, University of Lisbon, PT
- **Domingos Viegas**, President of the ADAI, PT
- **João Bugalho**, Silvicultural Engineer - Professor Invited - ISA, PT
- **Ricardo Vélez**, PhD in Forestry Engineering, Spanish Society of Forestry Sciences (SECF), PT

LOCAL ORGANIZER COMMITTEE

Tiago M. Oliveira, *Chair, AGIF, PT*

- **Mário Monteiro**, *AGIF, PT*
- **Pedro Santos Paulo**, *AGIF, PT*

INTERNATIONAL LIAISON COMMITTEE (ILC)

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- **Bill DeGroot**, *CA*
- **Chelene Hanes**, *CA*
- **ChunGeun Kwon**, *KR*
- **Elena Hernández Paredes**, *ES*
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- **Hwan-ok MA**, *JP*
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- **Ko Raksam**, *KR*
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- **Pedro Santos Paulo**, *PT*
- **Rob Webb**, *AU*
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- **Steve Griffin**, *USA*
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- **Duarte da Costa**, *ANEP, PT*

- **João Alves**, *CEMFA, PT*
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- **José Tavares**, *Court of Auditors, PT*
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- **José Manuel Santos Correia**, *GNR, PT*
- **Luís Neves**, *PJ, PT*

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Johann Goldammer, *GFMC, DE*

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- **Mário Monteiro**, *AGIF, PT*
- **Peter Moore**, *NRFC Ltd, AU*
- **Catherine Gamper**, *OECD, FR*

SCIENTIFIC COMMITTEE

José Miguel Cardoso Pereira, *Chairman of the Scientific Committee, University of Lisbon, PT*

- **Abílio Pereira Pacheco**, *ForestWISE, PT*
- **Ana Isabel Miranda**, *University of Aveiro, PT*
- **Ana Sá**, *ForestWISE, PT*
- **Andrew Matthews**, *National Aerial Firefighting Centre of Australia, AU*
- **Akli Benali**, *University of Lisbon, PT*
- **Alan Ager**, *FS Research Forester (Retired), USA*
- **Alen Slijepcevic**, *Fire Risk, AU*
- **Alex Held**, *European Forest Institute EFI, FI*
- **Carlos da Câmara**, *University of Lisbon, PT*
- **Chelene Hanes**, *Natural Resources Canada, CA*
- **Christopher Justice**, *University of Maryland, USA*
- **Eduardo Simões**, *DINÂMIA'CET-ISCTE, PT*
- **Fantina Tedi**, *University of Porto, PT*
- **Francisco Moreira**, *University of Lisbon and University of Porto, PT*

- **Francisco Seijo**, *School of Global and Public Affairs, ES*
- **Jan Jacob Keizer**, *University of Aveiro, PT*
- **Jesus San Miguel**, *European Commission Joint Research Centre, BE*
- **Joana Vaz Sousa**, *Centre for Social Studies, University of Coimbra, PT*
- **João Silva**, *University of Lisbon, PT*
- **Joaquim Sande Silva**, *Polytechnic Institute of Coimbra and Centre for Functional Ecology, PT*
- **José Manuel Oliveira Mendes**, *University of Coimbra, PT*
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- **Michael Coughlan**, *University of Oregon, USA*
- **Miguel Bugalho**, *University of Lisbon, PT*
- **Natasha Ribeiro**, *Eduardo Mondlane University, MZ*
- **Nuno Guiomar**, *University of Évora, PT*
- **Owen Price**, *University of Wollongong, AU*
- **Paulo Fernandes**, *University of Trás-os-Montes and Alto Douro and ForestWise Colab, PT*
- **Peter Moore**, *NRFC Ltd, AU*
- **Pia-Johanna Schweizer**, *Institute for Advanced Sustainability Studies e.V., DE*
- **Rodrigo Falleiro**, *IBAMA, BR*
- **Sandra Whight**, *The National Council for Fire and Emergency Services, AU*
- **Sally Archibald**, *University of the Witwatersrand, ZA*
- **Yannick Le Page**, *AGIF, PT*

* All names presented by alphabetical order

ABOUT THE ILC

With the 1st International Wildland Fire Conference (IWFC) held in Boston, Massachusetts, U.S.A., in 1989, a series of conferences was initiated aimed at promoting exchange of expertise and international cooperation in wildland fire management. These conferences have gathered thousands of participants around the world and are overseen by The International Liaison Committee (ILC), serving as an advisory and liaison body to the hosts of the conferences. The ILC recognizes that landscape fire management is an international issue, thus working closely with conference hosts and seeking new opportunities for sharing experiences in this area of knowledge. The host of the 9th Wildland Fire Conference will be announced in Porto, May 2023.

PREVIOUS EDITIONS OF THE CONFERENCE

- **IWFC 7 – 2019 (Campo Grande, Brazil)**
- **IWFC 6 – 2015 (Pyeongchang, South Korea)**
- **IWFC 5 – 2011 (Sun City, South Africa)**
- **IWFC 4 – 2007 (Sevilla, Spain)**
- **IWFC 3 – 2003 (Sydney, Australia)**
- **IWFC 2 – 1997 (Vancouver, Canada)**
- **IWFC 1 – 1989 (Boston, U.S.A.)**

INSTITUTIONAL PARTNERS

Meet the organizations that have joined the Wildland Fire 2023 to conduct joint sessions and support the conference.



MORE THAN

These numbers are the result of the tireless mobility of participants from all over the world. Thanks to the fundamental support of sponsors and exhibitors, the sharing of knowledge by speakers, the support of local partnerships and The High Patronage of the President of the Portuguese Republic - o Presidente da República - the Conference will most definitely be a memorable moment to remember and live by in the future.

1200
PARTICIPANTS

65
SESSIONS

45
EXHIBITORS

200
SPEAKERS

12
SPONSORS

80
PARTICIPANT
COUNTRIES

2000 m²
EXHIBITION
AREA

VENUE

ALFÂNDEGA DO PORTO CONGRESS CENTER

CONFERENCE VENUE

Alfândega do Porto Congress Center

Located in the historic center of Porto on the banks of the Douro River, the Alfândega do Porto Congress Center is a historic building, restored by the architect Souto Moura. The Alfândega Congress Centre has been awarded the prize as Best Meetings & Conference Centre at the Europe Business Destinations Travel Award 2014, 2015 & 2017.

Address: Rua Nova da Alfândega, Edifício da Alfândega - 4050-430 Porto
Tel.: +351 223 403 000/24 | +351 223 403 099
E-mail: geral@ccalfandegaporto.com
www.ccalfandegaporto.com

CONFERENCE DATES

16th to 19th of May 2023

REGISTRATION AND DATA CENTRE - OPENING HOURS

Monday, 15 May: 9:00 AM to 7:00 PM

Tuesday, 16 May: 8:00 AM to 6:00 PM

Wednesday, 17 May: 8:00 AM to 6:00 PM

Thursday, 18 May: 8:00 AM to 6:00 PM

Friday, 19 May: 8:00 AM to 1:00 PM

CONTACTS

+351 916 217 451 - info@wildfire2023.pt

CONFERENCE BADGES

Conference badges are compulsory for admission & access to the scientific program sessions and the exhibition area.

CLOAKROOM

Luggage and checkroom facilities are available on site free of charge.

INTERNET AVAILABILITY

Wireless Internet access is available free of charge in the conference venue.

Name - **WILDFIRE 2023**

Password - **PORTUGAL**

LANGUAGE

The official Conference language is English.

SOCIAL MEDIA

Twitter - [@8thIwfc](https://twitter.com/8thIwfc)

Instagram - [@8th_iwfc](https://www.instagram.com/8th_iwfc)

LinkedIn and Facebook - **8th IWFC International Wildland Fire Conference**

OFFICIAL HASHTAGS

#WildlandFirePorto2023 #8thIWFC2023

#GovernancePrinciples #InternationalFramework

#ManagingWildfireRisk

CONFERENCE APP

The official app - **Wildfire2023**

Available for Android and iOS

REGION - USEFUL INFORMATION

TASTE PORTO

Be part of a tasty adventure full of good food, good stories, and great wines. Get to know some restaurants in the region www.visitporto.travel

TELEPHONE NUMBERS

National Emergency Number - 112

Police Tourism Station

Praça de Pedro Nunes 16, 4050-466 Porto
+351 222 092 006

OTHER IMPORTANT CONTACTS

Tourism Office Sé (Medieval Tower)

Address: Calçada Dom Pedro Pitões 4050-467

Tel.: +351 935 557 024 / +351 223 326 751

Opening hours: 9:00 AM to 6:00 AM

Porto Welcome Center

Address: Praça Almeida Garret, 27 4000-069

Tel.: +351 927 411 817

Opening hours: 9:00 AM to 7:00 AM

Tourism Office - Francisco Sá Carneiro Airport

Address: Vila Nova da Telha 4470-558

Opening hours: 9:00 AM to 6:00 AM

LANDSCAPE FIRE GOVERNANCE FRAMEWORK

ADJUSTING STRATEGIES, POLICIES, AND MANAGEMENT, TO GLOBAL CHANGE

With over 300 million hectares burned annually, Landscape Fires are assuming increasingly extreme characteristics and causing more severe impacts on populations and ecosystems. They are a local problem with global consequences. Fires are a synthesis of the context, and as such, they arise from socio-economic dynamics mediated by public policies and economic incentives that determine land use and occupation, as well as our use of fire, and social dynamics. The diversity of causes, their systemic nature, and a growing number of stakeholders with different visions and solutions require that the simpler dichotomy of prevention and response gives way to a more robust framework capable of addressing complexity and uncertainty. To better prepare societies to achieve sustainable development goals and ensure lower losses to fire, the technical and scientific community at the 8th International Wildland Fire Conference in Porto, proposes a fire governance model (Landscape Fire Governance Framework) that brings governments, businesses, academia, and members of civil society together in balanced and technically supported solutions. This framework presents the guidelines for the development of this model.

SUMMARY

- I. Unplanned and uncontrolled landscape fires are increasing, correlated with social, economic, and ecological changes. This creates both direct and indirect socio-economic impacts, such as loss of lives, property and livelihood, health, and safety issues, and negatively impacts sustainable development goals, as more than 300 million hectares are annually affected.
- II. The Landscape Fire Governance Framework (“framework”) is a legally non-binding, voluntary, set of guiding principles, goals, and governance proposals, for adjusting strategies, policies, and landscape fire management at a global level, answering to global challenges. The framework is aimed at policy makers and decision makers.
- III. Under the framework, integrated fire management is considered critical for sustainable landscape management, developing governance models that address risk and involve different stakeholders, bringing together the diversity of scientific and cultural knowledge, values, and political options. International guiding principles are proposed, as an orientation towards the management of the increasing risk of wildfires.
- IV. The framework does not intend to suppress or ignore national or local options and heritages, but rather to offer a view into a shared goal of a significant loss reduction from wildfires, adding expertise and the latest research and scientific knowledge, enhancing risk governance, and having a clear scope of action for all stakeholders.
- V. Action is needed strengthening governance models, as responding to such a complex challenge requires the best coordination possible among all stakeholders. Similarly, valuing rural areas will help people getting a return from the land, which in turn allows them to better care and manage their land, reducing exposure and vulnerability to wildfires. Action is also needed changing behaviours, avoiding

actions that result in unplanned and uncontrolled fires. Should these fail, response is needed, and to that end, training and qualification programs offer the best-qualified responders, suppressing fire, protecting people and their livelihoods.

VI. The proposed governance model calls for fire risk assessment and determining how communities and cultures perceive risk and accept fire impacts. That perception drives risk management and helps communicating clearly. Stakeholder engagement is crucial for governance, and having stakeholders involved in decision-making helps with monitoring and aiming at continuous improvement, measuring progress and planning for shorter periods under a context of uncertainty.

VII. The framework governance model recognizes that fires have a broader value chain than just prevention, suppression, and recovery, and as such proposes a value chain where all accountable actors have a role to play. This calls for integrated actions and good communication between all stakeholders, as they must understand what the challenges are and what deliberations are asked for.

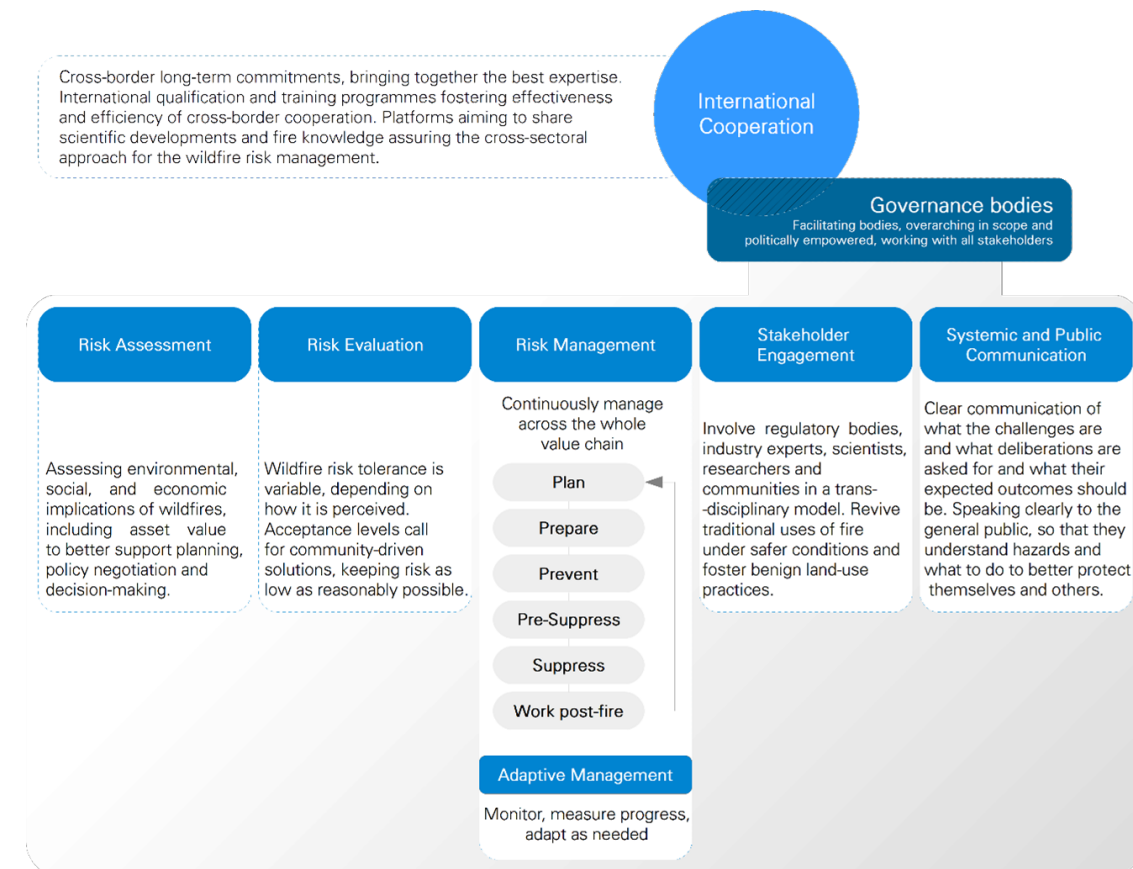
VIII. To better achieve integration of stakeholders and clear communication, overarching governance bodies are useful politically and technically empowered tools, facilitating domestic coordination as well as international cooperation.

IX. International cooperation benefits from qualification and training programs, based on widely accepted standards, fostering effectiveness and efficiency of cross border cooperation, but also creating a good platform for the exchange of information on best practices at all stages of the wildfire value chain.

X. Moving forward, based on this framework, countries are invited to promote integrated landscape fire management by bridging existing gaps through governance options that foster cross-agency and cross-sectoral dialogue, and to join efforts to strengthen networks and thematic resource centres for domestic and international sharing of best practices and innovation. Under the United Nations, this framework could also be the base for further, binding agreements.

XI. An international mechanism, under the United Nations, is sought, to promote the implementation of a global integrated fire management program, and to facilitate financing of integrated fire management actions, worldwide.

XII. Integrated fire management requires moving from management alone to solid governance models and stakeholder engagement with clearly set roles at all value chain stages, training and qualification programs, and strengthened international cooperation.



A summarized diagram view of a landscape fire governance continuum



Download your mobile app on the App Store or Play Store, searching for **Wildfire2023**.

- Read the QR Code, using the camera of your smartphone or tablet.



CONFERENCE WEBSITE
www.wildfire2023.pt



PROGRAM

ABOUT THE PROGRAM

We hope that you will enjoy the program of the 8th International Wildland Fire Conference. We have structured the program in a way to cover the main themes of integrated fire management, and especially how governance can be done in this important challenge for our countries.

To achieve this, you will find plenary sessions that aim to offer an overview of the main topics, leading you to the presentation of the international "Landscape Fire Governance Framework". Additionally, you will have access to oral communications and e-poster presentations to share the scientific perspective on the 11 sub-themes that we have identified, linked to the framework.

As for more practical components, you will be able to participate in workshops, and there will also be technical visits to observe on-the-ground territory management models and practices. Finally, do not forget about the social and cultural events, a perfect moment for networking among the conference participants and sharing best practices in this field of knowledge.



Integrated Fire Management

PLANNING AND PREPARATION

Defining interventions and resources needed at the community and government levels, as well as ensuring that citizens and organizations are prepared to act under best safety practices.

PREVENTION AND PRE-SUPPRESSION

Reducing exposure and vulnerability to fire and maintaining a state of preparedness for immediate intervention.

SUPPRESSION AND RELIEF

Suppressing fire and providing relief to those affected by fire.

POST-FIRE INTERVENTION

Dealing with the restoration and rehabilitation actions required in the aftermath of a fire.

QUALIFICATION

Training and certification on all integrated fire management expertise areas.

TECHNICAL INNOVATION

Innovation on software applications and technological equipments and solutions, and operational communications systems.



Fire Risk Governance

RISK HANDLING

Dealing with risk perception, assessment, management and translational research, encompassing traditional and indigenous knowledge.

STAKEHOLDER ENGAGEMENT

Inclusive risk-related decision-making and conflict resolution, regarding multi-level policy design, sustainability, and funding.

ADAPTIVE MANAGEMENT

Process Monitoring and Planning Evaluation for continuous improvement and lessons learnt and analysis of physical and social impacts due to changes in fire governance.

COMMUNICATION

Risk Communication – exchanging or sharing risk-related data, information and knowledge between and among different groups such as scientists, regulators, industry and general public; Public report of system performance.

INTERNATIONAL COOPERATION

Cross-border cooperation on training, best-practices, and standards.

THE WORLD IS FACING THE GREAT WILDFIRES OF THE XXI CENTURY

ARE YOU READY?

**Innovative Solutions
for Wildland Firefighting**



- PLENARY SESSIONS
- THEMATIC SESSIONS
- ORAL PRESENTATIONS
- E-POSTER PRESENTATIONS
- WORKSHOPS
- SOCIOCULTURAL PROGRAM
- INDUSTRY SESSIONS

Nascente Room - Ground Floor

18:00-20:00

Welcome Cocktail / Exhibition Opening

● PLENARY SESSIONS ● THEMATIC SESSIONS ● ORAL PRESENTATIONS ● E-POSTER PRESENTATIONS ● WORKSHOPS ● SOCIOCULTURAL PROGRAM ● INDUSTRY SESSIONS

	Arquivo Room	Infante Room	D. Maria Room	D. Luís Room
09:00-11:00	Opening Ceremony			
11:00 – 11:30	Coffee Break Exhibition Area – Ground Floor			
11:30-13:00	The Problem			
13:00-14:30	Lunch Ground Floor			
14:30-16:00	Risk Assessment	Technical Innovation	The challenges of implementing fire management public policies in Community Territories	
16:00 – 16:30	Coffee Break Exhibition Area – Ground Floor			
16:30-18:00	Risk Evaluation and Decision Making	Solutions for Fire Resilient Territories in Europe	Tropical Forest Fire Prevention for Integrated Fire Management: From Guidelines to Best Practices in Field Implementation	Auditing Governance of Wildland Fire Risk - The Role of Supreme Audit Institutions
18:15-19:45			Environmental Education Workshop on Integrated Fire Management	

Miragaia Room

S . João Room

Arrábida Room

Porto Room

Coffee Break Exhibition Area – Ground Floor

Lunch
Ground Floor

International Cooperation

Qualification

Coffee Break Exhibition Area – Ground Floor

Qualification

Technical Innovation

Improving Fire management in the tropics using inclusive landscape approaches

Expert Group Latin American, Caribbean and Europe

● E-POSTER PRESENTATIONS ● WORKSHOPS ● SOCIOCULTURAL PROGRAM ● INDUSTRY SESSIONS

	Arquivo Room	Infante Room	D. Maria Room	D. Luís Room	Miragaia Room	S . João Room	Arrábida Room	Porto Room
09:00-11:00	Integrated Fire Management							
11:00 – 11:30	Coffee Break Exhibition Area – Ground Floor				Coffee Break Exhibition Area – Ground Floor			
11:30-13:00	Communication	Planning	Integrated Fire Management in resource poor countries			Stakeholder Engagement	International Cooperation	Repsol
13:00-14:30	Lunch Ground Floor				Lunch Ground Floor			
14:30-16:00	International Cooperation	Preparation & Prevention	Fire Science – Book Presentation	Communication		Technical Innovation	Stakeholder Engagement	
16:00 – 16:30	Coffee Break Exhibition Area – Ground Floor				Coffee Break Exhibition Area – Ground Floor			
16:30-18:00	Stakeholder Engagement	Global Wildland Fire Network (GWFN) – Use Cases	Wildfire Women Group	Insurances: Impact on Public Policies and a nudging instrument		Communication	Prevention & Pre-Supression	Incentivizing savanna management: challenges and opportunities
18:15-19:45	IAWF Award	Social Participation and Local Fire Governance through International Networks	Post-fire Assessment and Management	Training and education needs to guide future integrated fire management			Aerial Resources Management	
19:30 – 20:00								

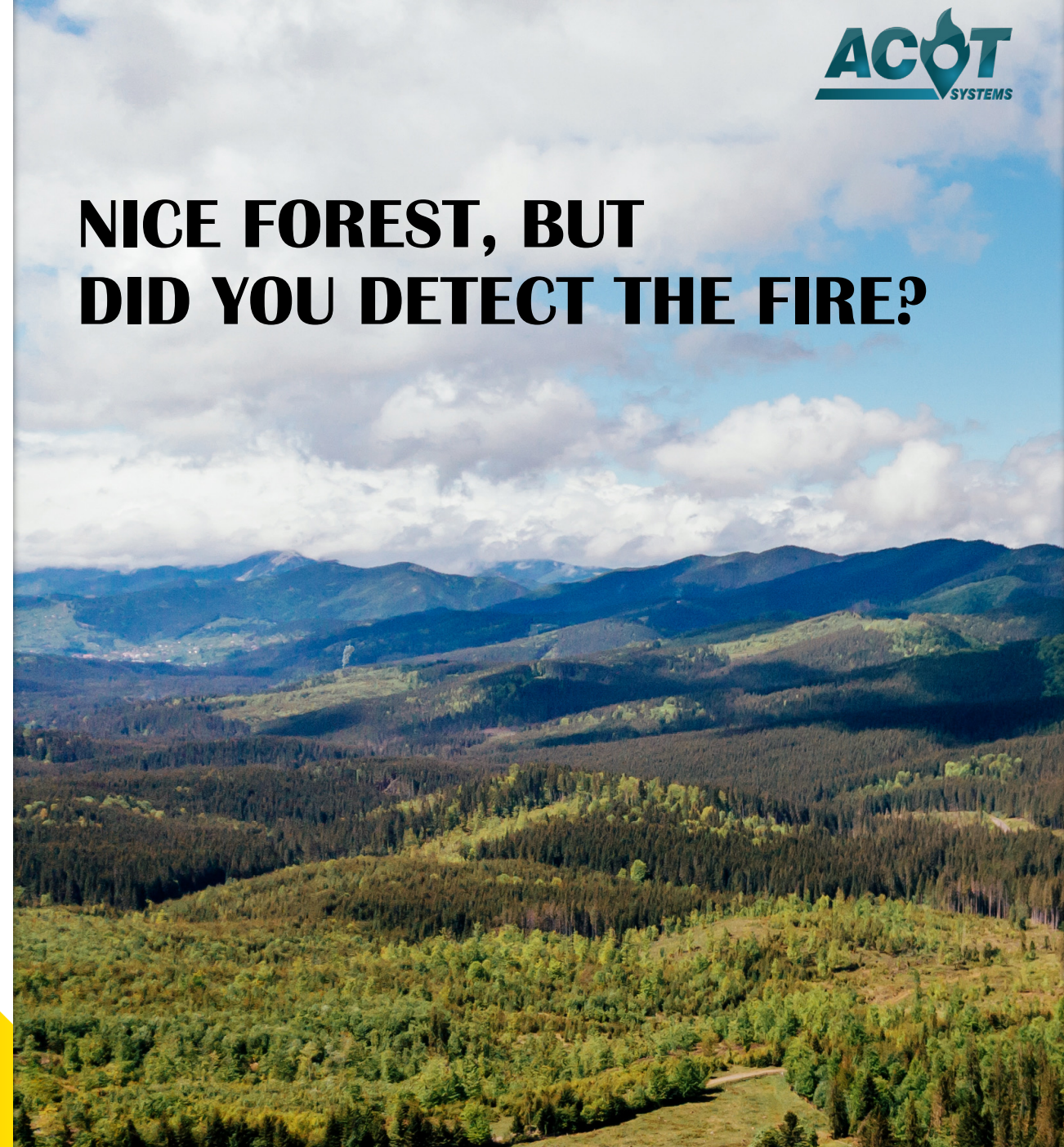
● E-POSTER PRESENTATIONS ● WORKSHOPS ● SOCIOCULTURAL PROGRAM ● INDUSTRY SESSIONS

	Arquivo Room	Infante Room	D. Maria Room	D. Luís Room	Miragaia Room	S . João Room	Arrábida Room	Porto Room
09:00-11:00	Fire Risk Governance							
11:00 – 11:30	Coffee Break Exhibition Area – Ground Floor				Coffee Break Exhibition Area – Ground Floor			
11:30-13:00	OECD Flagship Report Launch: Adapting to a changing climate in the management of extreme wildfires	Pre-suppression & Suppression		Adaptive Management	Risk Handling	Planning & Preparation	Post-Fire Intervention	Waterax
13:00-14:30	Lunch Ground Floor				Lunch Ground Floor			
14:30-16:00	Forest & Economy - Public Policies	Post Fire Intervention		Planning & Preparation	Prevention & Pre-Suppression	Adaptive Management	Supression & Relief	Pegasus
16:00 – 16:30	Coffee Break Exhibition Area – Ground Floor				Coffee Break Exhibition Area – Ground Floor			
16:30-18:00	Adaptive Management	Volunteering in Integrated Fire Management	Forest and Peatland Fire Management – best practices and challenges in ASEAN, examples from Indonesia and Malaysia		Post Fire Intervention	Suppression and Relief	Risk Handling	
18:00-19:30		The Pyrocene book release and discussion with Stepen Pyne, Viriato Soromenho Marques and Carlos Vaz Marques						
20:00-23:00	Conference Dinner				Conference Dinner			

- PLENARY SESSIONS
- THEMATIC SESSIONS
- ORAL PRESENTATIONS
- E-POSTER PRESENTATIONS
- WORKSHOPS
- SOCIOCULTURAL PROGRAM
- INDUSTRY SESSIONS

	Arquivo Room
09:00-11:00	Framework
11:00 – 11:30	Coffee Break Exhibition Area – Ground Floor
11:30-13:00	Closing Ceremony

NICE FOREST, BUT DID YOU DETECT THE FIRE?



**HIGH PRECISION A.I. FOR
EARLY WILDFIRE DETECTION**

Quick deployment - Global operation - 24/7

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FREE pilot



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MONDAY, MAY 15

6:00 PM - 8:00 PM | **Welcome Cocktail & Exhibition Opening**
Exhibition Area | Ground Floor

TUESDAY, MAY 16

9:30 AM - 11:00 AM | **Opening Ceremony**


Arquivo Room | Plenary Session

 **Rui Moreira** | Mayor of Porto
António Cunha | President of the CCDR North
Gordon Sachs | Chair of International Liaison Committee (ILC)
Video Message António Guterres | Secretary General of the United Nations
Tiago M. Oliveira | Chair of the 8th IWFC Organizing Committee
Video Message Fraz Timmermans | Vice President of European Commission
Duarte Cordeiro | Portuguese Minister of Environment and Climate Adaptation

11:00 AM - 11:30 AM | **Coffee Break**
Exhibition Area | Ground Floor

11:30 AM - 1:00 PM | **The Problem**

Arquivo Room | Plenary Session


 The session will discuss: How the world got to a point in which landscape fires are a challenge, demanding more international cooperation and governance changes. The current situation and the way ahead. Expected outcomes after an international agreement on what could be done to mitigate landscape fire risk.

Chair: **Peter Moore** | Director of NRFC Ltd, AU
Keynote Speaker: **Stephen Pyne** | Fire historian and Emeritus Professor, Arizona State University, USA
Panelists: **Catherine Gamper** | Climate Change Adaption, OECD
Alexandre Quintanilha | Member of Parliament- President of Committee Of Science and Education, PT

1:00 PM - 2:30 PM | **Lunch**
Ground Floor

2:30 PM - 4:00 PM | **Risk Assessment**

Arquivo Room | Thematic Session


 The session will discuss: Best ways for identifying hazard, exposed elements and their vulnerability, as building blocks for risk assessment. Including predictive analytics and

projections under different scenarios, studying how different factors might impact landscape fire risk over time.

Chair: **Laurent Alfonso** | Senior Advisor for Civil Protection at UfM, FR
Keynote Speaker: **Alan Ager** | FS Research Forester (Retired), USA
Panelists: **Carlos C. da Câmara** | IDL / FCUL, PT
Cathelijne Stoof | Assistant Professor Wageningen University, NL
Francisco Rolo | Mayor of Oliveira do Hospital, PT

2:30 PM - 4:00 PM | **Technical Innovation**

Infante Room | Thematic Session

 The session will discuss: Innovations that help achieve the goals of landscape management at all value chain steps, such as new platforms for monitoring and assessing risk, early warning, using satellite imagery, supporting operations or data collection. Innovations in the form of new ways of managing fuels, restoring the land or building back better protected from future events.
Chair: **José Manuel Mendonça** | Chairman of the Board of INESC TEC, PT
Keynote Speaker: **Domingos Viegas** | Professor/Researcher, Univ Coimbra, ADAI, Department of Mechanical Engineering, PT
Joaquin Ramirez Cisneros | Technosylva, USA
Panelists: **Paulo Madeira** | eBUPi, PT
Alexander Held | European Forest Institute

2:30 PM - 4:00 PM | **The challenges of implementing fire management public policies in Community Territories**

D. Maria Room | Workshop

The session will discuss: Governments are primarily responsible for implementing public policies to protect against forest fires. Everywhere, laws, programs and projects are created and implemented in public and private areas. However, when these policies reach indigenous, traditional and tribal communities, several cultural aspects can influence the results of these policies, generating synergies or conflicts. Sophisticated and standardized fire management designs have been brought to these communities around the world in recent years. Often their efficiency and support were hampered by a lack of understanding and integration with their target audience.
The purpose of this session is to open space for representatives of indigenous communities, government agencies and organized civil society, with the aim of indicating the best way to avoid conflicts and create synergy in initiatives to protect against forest fires.
Speaker: **Rodrigo Falleiro** | PrevFogo, IBAMA, Brasília
Speaker: **Leonardo Gomes** | Director, SOS Pantanal

2:30 PM - 4:00 PM | **International Cooperation**

S. João Room | E-Poster Presentations

Chair: **Carolyn Enquist** | US Geological Survey

PP01 (IWFC195) - WILDFIRE DISASTER RISK REDUCTION AND LANDSCAPE FIRE MANAGEMENT IN SOUTH ASIA REGION: EXPERIENCES FROM NEPAL

Sundar Sharma¹

¹Coordinator-UNDRR-South Asia Wildland Fire Network, Nepal

PP02 (IWFC434) - INTERREGIONAL MUTUAL ASSISTANCE IN EMERGENCIES AND CROSS-BORDER RISKS (ARIEM+ AND INTERLUMES INTERREG POPTEC PROJECTS CONTRIBUTION TO IMPROVE COORDINATION)

Angel Manuel Sanchez Martin¹, **Belinda Guerra Burton¹**, Teresa Mompín Alvarez

¹Castilla y León Regional Government, Valladolid, España

PP03 (IWFC431) - INTERNATIONAL COOPERATION IN FIRE MANAGEMENT - ADVANCEMENTS SINCE THE 7TH INTERNATIONAL WILDLAND FIRE CONFERENCE 2019

Johann Georg Goldammer¹

¹Global Fire Monitoring Center (GFMC), Freiburg, Germany

PP04 (IWFC250) - INCLUSIVE FIRE-SMART LANDSCAPES AS A PROMISING APPROACH FOR EFFECTIVE WILDFIRE PREVENTION AND MANAGEMENT

Rosalien Jezeer¹, Atiek Widayati², Laurenz Romero⁴, Mercy Owusu Ansah³, Richard Ssemmanda⁵, John Livingstone⁶, Nick Pasiecznik¹

¹Tropenbos International, Ede, the Netherlands, ²Tropenbos Indonesia, Bogor, Indonesia,

³Tropenbos Ghana, Kumasi, Ghana, ⁴Instituto Boliviana de Investigación Forestal (IBIF), Santa Cruz, Bolivia, ⁵Ecological Trends Alliance (ETA), Kampala, Uganda, ⁶Penha, Addis Ababa, Ethiopia

PP05 (IWFC491) - AN EMERGING FRAMEWORK FOR ADAPTING TO CHANGING FIRE REGIMES: REIMAGINING SCIENCE, MANAGEMENT, AND CULTURE

Acting Director, Sw Climate Adaptation Science Center Carolyn Enquist¹, Science Advisor Molly Hunter²

¹Southwest Climate Adaptation Science Center, Southwestern US, United States, ²Joint Fire Science Program, Southwestern US, USA

PP06 (IWFC440) - AN INNOVATIVE ASSESSMENT FRAMEWORK TO CONDUCT PEER REVIEWS ON WILDFIRE RISK MANAGEMENT UNDER THE UNION CIVIL PROTECTION MECHANISM (UCPM).

Veronica Maria Casartelli^{1,2}, Jaroslav Mysiak^{1,2}

¹Euro-Mediterranean Centre On Climate Change, Italy, ²Cà Foscari University of Venice, Italy

PP07 (IWFC127) - HOW TO BREAK THE BARRIER TO SHARE DECISION MAKING SUPPORT AND STRATEGIC EXPERTS ON WILDFIRE SUPPRESSION

Elena Hernández Paredes¹, Ángela Iglesias Rodrigo¹

¹Ministry For The Ecological Transition And Demographic Challenge, Madrid, Spain

PP08 (IWFC158) - FIRE MANAGEMENT IN ETHIOPIA: PAST, PRESENT, AND FUTURE

Solomon Zewdie, John Livingstone, Habtemariam Kassa, Kebede Yimam, Niguse Hagazi, Amsale Shibeshi

¹Consultant, Addis Ababa, Ethiopia

PP09 (IWFC74) - DEVELOPMENT OF THE INTERNATIONAL POSITION PAPERS BY THE INTERNATIONAL ASSOCIATION OF WILDLAND FIRE

Alen Slijepcevic¹, Toddi Steelman², Joaquín Ramirez³

¹Country Fire Authority, Melbourne, Australia, ²Duke University, Durham, United States of America, ³Technosylva, San Diego, United States of America

2:30 PM - 4:00 PM | **Qualification**

Arrábida Room | Oral Communications

Chair: **Michael Bruce** | Director of Glen Tanar Estate, Founder of South Grampian Wildfire Group

OC01 (IWFC28) - CONTEXTUALIZING THE IMPLEMENTATION OF ENVIRONMENTAL EDUCATION IN INTEGRATED FIRE MANAGEMENT BY THE FEDERAL INDIGENOUS BRIGADE OF PREVFOGO/IBAMA/MA

Ana Rosa Marques¹, Francinete Correa Pacheco¹

¹Instituto Brasileiro de Meio Ambiente e dos Recursos Naturais Renováveis IBAMA PREVFOGO/MA; Universidade Estadual do Maranhão UEMA, São Luís, Brasil, ²Instituto Brasileiro de Meio Ambiente e dos Recursos Naturais Renováveis IBAMA/PREVFOGO/MA, São Luís, Brazil

OC02 (IWFC133) - THE NOLEEDI PROJECT: EFFECTS OF IFM CONDUCTED BY INDIGENOUS BRIGADES IN WILDFIRE PREVENTION AND BIODIVERSITY CONSERVATION IN A SAVANAH/WETLAND ECOTONE

Danilo Ribeiro¹, Alexandre Pereira, Gilberto Pires, Rudi Laps, Fábio de Oliveira Roque, Paulo Souza, Geraldo Damasceno, Dr. Ieda Maria Bortolotto, Erich Fischer, Dr. Leticia Garcia, Bruno Ferreira, Fabio Bolzan, Aline Lopes, Maxwell Oliveira, Cyntia Santos, Áurea Garcia, Rafaela Nicola, Julio Fernandes, Lílian Pereira, Fernanda Santana Shakiham, Allison Ishy, Thiago Teles, Keyciane Pedrosa, Sylvia Torrecilha, Rafaela Fernandes, Ademilson Costa, Mesaque Rocha, Silvio Xavier, Rubens Ferraz

¹Ufms, Campo Grande, Brazil

OC03 (IWFC75)- WANĪ-HÊWA PROJECT: COMBINING INDIGENOUS PEOPLES' UNDERSTANDING OF WILDFIRE WITH EXPERIENCES FROM THE NATIONAL CENTER FOR WILDFIRE PREVENTION AND SUPPRESSION (PREVFOGO)

Lawrence Oliveira¹, **Talita Freitas¹**, Luiz Motta¹, Gildimar Xerente²

¹Prevfogo/Ibama, Brasília, Brazil, ²Prevfogo/Ibama, Palmas, Brazil

OC04 (IWFC265) - WE ARE FEW, BUT WE ARE NOT ALONE - THE IMPORTANCE OF WOMEN PARTICIPATION IN WILDFIRE PREVENTION AND SUPPRESSION BRIGADE

Isis Akemi Morimoto¹, **Thainan Bornato¹**, Thaís Fernandes¹, Ana Rosa Marques¹, Mariana Momesso¹

¹Ibama - Brazilian Institute of the Environment and Renewable Natural Resources, related to The Ministry of the Environment, São Paulo, Brazil

OC05 (IWFC464) - THE TRAINING OF INSTRUCTORS IN WILDLAND FIREFIGHTERS COURSES: A COMPARISON BETWEEN BRAZIL, THE USA AND CHILE.

Elisa Silva¹, Paula Lima¹

¹Ibama, Brasília, Brazil

OC06 (IWFC112) - CDF. 20 YEARS OF TRAINING AND AWARENESS CAMPAIGNS: LESSONS LEARNED.

Victor Fernandez Huertas¹, ENRIQUE REY VAN DEN BERCKEN¹

¹CDF - Junta De Castilla y León, León, Spain

OC76 (IWFC77) - SPACIAL DISTRIBUTION OF INDIGENOUS FIREFIGHTERS IN RORAIMA BRAZIL: SOCIOECONOMIC AND ENVIRONMENTAL OPPORTUNITIES OF PREVFOGO'S FEDERAL BRIGADES PROGRAM IN INDIGENOUS RESERVES

Joaquim Lima¹, **Talita Freitas**²

¹National Center for Wildfire Prevention and Suppression (Prevfogo/Ibama), Boa Vista, Brazil,

²National Center for Wildfire Prevention and Suppression (Prevfogo/Ibama), Brasília, Brazil

4:00 PM - 4:30 PM | **Coffee Break**

Exhibition Area | Ground Floor

4:30 PM - 6:00 PM | **Risk Evaluation and Decision Making**

Arquivo Room | Thematic Session

The session will discuss: Risk acceptance at various levels of engagement, and how impacts are perceived and to which extent are they deemed as acceptable. How community-driven solutions can help defining as low as possible levels of acceptable risk. How are decisions negotiated and scientific knowledge incorporated in the decision making process.

Chair: **Abílio Pereira Pacheco** | Forestwise - Collaborative Laboratory for Integrated Forest and Fire Management, PT

Keynote Speakers: **Antoine Bavandi** | Global Head of Public Sector, Parametric & Climate Resilience Solutions Gallagher Re., UK

Richard de Neufville | Professor of Engineering Systems at the Massachusetts Institute of Technology, USA

Panelists: **Jeremy Russell-Smith** | Professor at Darwin University, AU

António Cunha | President of the North Regional Coordination and Development Commission (CCDR-N)

4:30 PM - 7:45 PM | **Solutions for Fire Resilient Territories in Europe**

Infante Room | Workshop



The session will discuss: Innovative technologies and socio-economic solutions for fire-resistant territories in Europe; integrated fire management; technical innovations; stakeholder engagement and risk communication strategies; as well as policy coherence

Chair: **Brigite Botequim** | Senior Researcher Colab ForestWISE

Pau Brunet | Ctfc

Speakers: **Anthony Graziari** | CNR, FIRE-RES

Adrian Cardil | Senior Researcher, Tecnosylva

Carlos Fonseca | Chief Technology Officer, ForestWISE

Marta Serra | Researcher, Ctfc

Siebe Briers | EFI, FIRE-RES

Antoni Trasobares | Director-coordinator FIRE-RES, Center for Forest Science and Technology de Catalunya

Mar Viana | IDAEA-CSIC

Conceição Colaço | Invited researcher, University of Lisbon

Claudia Berchtold | Fraunhofer Institute for Technological Trend Analysis (INT)

Sandra Valente | Senior reseacher, Collaborative Laboratory For Integrated Forest & Fire Management

Eduard Mauri | European Forest Institute

Eduard Plana | Head of Forest Policy and Risk Governance, Ctfc

4:30 PM - 6:00 PM | **Tropical Forest Fire Prevention for Integrated Fire Management: From Guidelines to Best Practices in Field Implementation**

D. Maria Room | Workshop

Forest fires in the tropics have become a major concern due to their severe impact on communities and ecosystems, as well as the economic costs they incur. In 2019 alone, forest fires in Indonesia released around 708 million tonnes of CO2 into the atmosphere. According to a new report by the UN Environment Program (UNEP) and GRID-Arendal, climate change and land-use change are projected to make wildfires more frequent and intense, and global wildfires will increase up to 14 per cent by 2030, 30 per cent by the end of 2050 and 50 per cent by the end of the century, and the regions affected by wildfires will likely increase significantly. As part of its efforts to assist member countries, ITTO has been promoting tropical forest fire guidelines as a policy reference, along with field capacity building projects in the three tropical regions. Recently, ITTO initiated two fire projects in Indonesia and Peru, which were funded under the Japanese Government's emergency assistance program. These projects aim to provide comprehensive training programs for local stakeholders on agriculture waste practices, adoption of technologies to detect and minimize fires, and improved cooperation among local institutions, the private sector and communities on forest and land fire management. The lessons learned from these projects, along with ongoing research outcomes in Ghana, will contribute to the development and implementation of forest fire policies and strategies to limit extreme forest and land fires in the tropics.

Keynote Speaker: **Johann Georg Goldammer** | Director, Global Fire Monitoring Center (GFMC), DE

Speakers: **Lucy Amissah** | CSIR-Forestry Research Institute of Ghana

Elvira Gómez Rivero | DG, General Directorate of Information and Forest and Wildlife Management, National Forest and Wildlife Service (SERFOR)

Bambang Hero Saharjo | Faculty of Forestry, Bogor Agricultural University (IPB), Indonesia

4:30 PM - 6:00 PM | **Auditing governance of wildland fire risks - the role of Supreme Audit Institutions****D. Luís Room** | Workshop

The session will discuss: The role of SAIs, about the most common risks, shortcomings and recommendations concerning the governance and management of wildland fires.

Chair: **Helena Lopes** | Member of the Portuguese Court of Auditors

Speakers: **Maria dos Anjos Capote** | Counselor Judge of the Court of Auditors

Mário Serrano | Counselor Judge of the Portuguese Supreme Court of Justice

Jonathan Dent | Assistant Director in GAO's Natural Resources and Environment

Cardell Johnson | Senior Executive in GAO's Natural Resources and Environment

Vital do Rêgo Filho | Minister of Federal Court of Accounts, Brazil (TCU)

Enriqueta Chicano Jávega | Spanish Court of Auditors

Luis Antonio Padua Ortiz De Mendivil Zorrilla | Spanish Court of Auditors

Morillas Gómez Javier | Spanish Court of Auditors

Nikolaos Milionis | Member of the European Court of Auditors

Fausto Carvalho Simões | Angolan Court of Auditors

4:30 PM - 6:00 PM | **Qualification****S. João Room** | E-Poster Presentations

PP10 (IWFC373) - TRAINING ON THE POTENTIAL OF CERRADO FRUITS AS AN AWARENESS OF INTEGRATED FIRE MANAGEMENT IN JALAPÃO, TOCANTINS, BRAZIL.

Ana Rosa Marques, Genifer Oliveira¹

¹*Instituto Federal Do Tocantins, Mateiros, Brazil*

PP12 (IWFC495) - THE EVOLUTION OF GENDER EQUITY IN THE PREVFOGO IBAMA INTEGRATED FIRE MANAGEMENT PROGRAM IN BRAZIL

Paula Lima¹, Elisa Silva¹

¹*Prevfogo/Ibama, Brasília, Brazil*

PP13 (IWFC488) - PHYSIOLOGICAL DEMANDS OF WILDFIRES SUPPRESSION ACCORDING TO WILDLAND FIREFIGHTERS' SEX

Jose A. Rodríguez-Marroyo¹, Fabio García-Heras¹, José Gerardo Villa Vicente¹,

Jorge Gutiérrez-Gutiérrez¹, MD Juan Rodríguez-Medina¹, Dr Belén Carballo-Leyenda¹

¹*Department of Physical Education and Sports, Institute of Biomedicine (IBIOMED), University of León, León, Spain*

4:30 PM - 6:00 PM | **Technical Innovation****Arrábida Room** | Oral Communications

Chair: **José Manuel Mendonça** | Chairman of the Board of INESC TEC

OC07 (IWFC351) - TERRESTRIAL LASER SCANNING FOR THE ESTIMATION OF TREE VOLUME AND BIOMASS OF CONIFER STEMS TO PROJECT FIRE BEHAVIOR

José Antonio Hernández-Moreno¹, Dr Diego R Pérez-Salicrup¹, **PhD Alejandro Velazquez**²

¹*Instituto de Investigaciones en Ecosistemas y Sustentabilidad, Universidad Nacional Autónoma de México, Morelia, Mexico*, ²*Colegio de Postgraduados, Campus Montecillo, Texcoco, México*

OC08 (IWFC378) - NASA'S WILDLAND FIRE MANAGEMENT PROGRAM

Ana Prados¹, Dan Green², Joanne Hall³, Amber Soja⁴, Jessica McCarty⁵

¹*University Of Maryland, Baltimore Co., Baltimore, US*, ²*NASA, United States*, ³*University of Maryland College Park, United States*, ⁴*National Institute of Aerospace, United States*, ⁵*Miami University, United States*

OC09 (IWFC126) - SPARK OPERATIONAL: AUSTRALIA'S NEW NATIONAL BUSHFIRE SIMULATOR

John Bally¹, Dr James Hilton², Dr Andrew Sullivan³, Will Swedosh², **Sandra Whight**¹

¹*AFAC, East Melbourne, Australia*, ²*CSIRO Data61, Melbourne, AUSTRALIA*, ³*CSIRO, Canberra, Australia*

OC10 (IWFC125) - IMPLEMENTATION OF WILDFIRE TECHNOLOGY SOLUTION FOR CAL FIRE (CALIFORNIA), LESSONS LEARNED AND PATH FORWARD

Philip SeLegue², **Joaquín Ramírez**¹

¹*Technosylva Inc, San Diego, United States*, ²*California Department of Forestry and Fire Protection (CAL FIRE), Sacramento, United States*

OC11 (IWFC516) - MAPPING BURNED AREAS IN THE BRAZILIAN AMAZON USING DEEP LEARNING AND PLANETSCOPE IMAGERY.

Leonardo Peres¹, Diogo Nunes Gonçalves¹, José Marcato Junior², Márcio Santos de

Araújo², Isabella Favero², Wesley Nunes Gonçalves², Renata Libonati¹

¹*Universidade Federal Do Rio De Janeiro, Brazil*, ²*Universidade Federal do Mato Grosso do Sul, Brazil*

OC12 (IWFC226) - HYBRID ENVIRONMENTAL MONITORING FOR EARLY WILDFIRE DETECTION

Fabrice Saffre¹, Hanno Hildmann², Hannu Karvonen¹, Timo Lind¹, Mr Jukka Sassi¹

¹*VTT, Espoo, Finland*, ²*TNO, Den Haag, The Netherlands*

OC13 (IWFC238) - ESTIMATION OF BYRAM'S FIRE INTENSITY AND RATE OF SPREAD FROMSPACEBORNE REMOTE SENSING DATA

Gernot Ruecker¹, Amara Ouattara³, Jean-Luc Kouassi², David Leimbach¹, Djafarou Tiomoko⁴, Pascal Koame³, Roger Kouadio³

¹*Zebris Geo-it GmbH, Germany*, ²*Institut National Polytechnique Felix Houphouet-Boigny, Yamoussoukro, Côte d'Ivoire*, ³*Office Ivoirien des Parcs et Réserves (OIPR), Abidjan, Côte d'Ivoire*, ⁴*GIZ Gesellschaft für Internationale Zusammenarbeit GmbH, Côte d'Ivoire*

6:15 PM - 7:45 PM | **Environmental Education Workshop on Integrated Fire Management****D. Maria Room** | Workshop

Speakers: **Thainan Bornato** | Ibama

Ricardo Lopes | Federal Employee, Brazilian Institute of Environment and Renewable Renewable Natural Resources

Ana Rosa Marques | Ibama/ Uema

Thaís Michele Fernandes | IBAMA

6:15 PM - 7:45 PM | **Improving fire management in the tropics using inclusive landscape approaches**
Arrábida Room | Workshop

The session will begin with an opening statement from the chair and co-chair, setting the context for the discussion and before each panelist shares their experiences on effective stakeholder engagement in developing and implementing fire prevention and management plans. The floor will then be open for those present to raise questions and introduce their own initiatives, experiences, examples and approaches. The focus of discussions will be on identify common considerations and lessons regarding how to ensure full stakeholder engagement at all levels and throughout of fire prevention and management planning that then can be upscale to a national or regional level. At the end of the event, the English and Spanish versions of 'Towards fire-smart landscapes' will be formally launched. The event is closely connected and complementary to the Tropenbos booth at the conference.

Chairs: **Humberto Gómez** | Tropenbos International

Johann Georg Goldammer | Director, Global Fire Monitoring Center (GFMC), DE

Speakers: **Karen Mendoza** | Bolivian Institute of Forest Investigation

Solomon Zewdie | Forestry and Climate Change Consultant, ET

Boakye Twumasi-Ankra | Tropenbos Ghana

Lisa Tanika | Tropenbos Indonesia

Richard Ssemmanda | Ecological Trends Alliance

Nick Pasiecznik | Tropenbos Indonesia

Luís Gomes | Tropenbos Indonesia

6:15 PM - 7:45 PM | **Expert Group Latin American, Caribbean and Europe**
Porto Room | Workshop

In this joint session between the EGFF and the EGFF LAC, we will learn about the activities in both groups, looking into synergies on wildfire management between these two different world regions that share a wealth of knowledge on the use and management of fires. The Expert Group on Forest Fires in Europe (EGFF), established in 1998, aims to bring together national fire managers in the pan-European region to discuss, learn and exchange good practices related to fire management in the countries, while supporting the European Commission in the conception and development of wildfire policies in the European Union. It is currently composed of national experts from 43 countries in Europe, Middle East and North Africa. The EGFF in Latin America and the Caribbean (EGFF LAC) was established in 2021 through the cooperation of the EU with national fire managers in the countries in LAC and international organizations involved in wildfire management such as the UN Food and Agriculture Organization (FAO), the UN Environment Program (UNEP) and the Amazon Cooperation Treaty Organization. It is currently composed of national experts from 10 countries in South America and Mexico. It aims, as its European counterpart, to facilitate the dialogue among fire managers in the region, to promote the exchange of information and good practices and to establish solid links for future cooperation activities to

support regional fire policies.

Speakers: **Margarita Medina** | ACTO

Pieter Van Lierop | ACTO

Elena Hernández Paredes | Ministry For the Ecological Transition and Demographic Challenge, ES

Ciaran Nugent | Forest Service, IR

WEDNESDAY, MAY 17

9:00 AM - 11:00 AM | **Integrated Fire Management**

Arquivo Room | Plenary Session



The session will discuss: The need for expertise and specialization of forest and civil protection activities in wildfire management. Institutional rearrangements for integrating and articulating intervention of different players. Making sure management guidelines are successfully implemented.

Chair: **José Miguel Cardoso Pereira** | Professor at ISA and Researcher at Center for Forestry Studies, University of Lisbon, PT

Keynote Speakers: **Gary Morgan** | Chairperson, Government of Victoria's Ministerial Advisory Committee on Wildland Fire Risk, AU

José Luís Carneiro | Portuguese Minister of Internal Affairs

Panelists: **Marc Castellnou** | Fire Chief Catalan, Fire and Rescue Service, SP

Judi Beck | Director General, Canadian Forest Service, CA

Lara Steil | Fire Management Officer, Forestry Division Food and Agriculture Organization of the United Nations

11:00 AM - 11:30 AM | **Coffee Break**

Exhibition Area | Ground Floor

11:30 AM - 12:15 PM | **Repsol**

Porto Room | Industry Session

11:30 AM - 1:00 PM | **Communication**

Arquivo Room | Thematic Session



The session will discuss: Best methods to convey clear and precise messages, among relevant organizations, fostering good data-sharing. How to best communicate, in an objective manner, with citizens on matters such as exposure to risk, early warning messages and good practices, taking stock of existing channels of communication.

Chair: **Fantina Maria Tedim** | University of Porto, PT

Keynote Speaker: **Cathelijne Stoof** | Assistant Professor, Wageningen University, NL

Kai Lintunen | Leader of the FAO-UNECE Forest Communicators Network (FCN)

Panelists: **Sarah McCaffrey** | US Forest Service (Retired)

Nestor Alfonso Santa Maria | OECD

11:30 AM - 1:00 PM | **Planning**
Infante Room | Thematic Session

The session will discuss: Integrated fire management as a value chain that goes through major stages, from planning to post-fire, demanding a clear attribution of responsibilities and duties. Key aspects enabling planning as a consistent tool for project implementation and monitoring, fostering tighter cooperation between relevant stakeholders at different levels of administration.

Chair: **Chelene Hanes** | Wildland Fire Scientist, Natural Resources Canada

Keynote Speaker: **Elena Hernández Paredes** | Ministry For the Ecological Transition and Demographic Challenge, ES

Speaker: **Timo Tolonen** | Finnish Forest Industries Federation

Panelists: **Murray Dudfield** | New Zealand Institute of Foresters

Francisco Castro Rego | Coordinator of the Fire Ecology and Management Research Area, University of Lisbon, PT

11:30 PM - 1:00 PM | **Integrated Fire Management in resource poor countries**
D. Maria Room | Workshop

The session will discuss: How can Integrated Fire Management principles be successfully replicated and brought to scale in resource-poor (Global South /African) countries? Knowledge capture of IFM practices that are transferable and scaleable Africa is the Fire Continent! In a world where the need for IFM application will always outweigh resources available, participants will explore what IFM governance, protocols, principles and practices can successfully accommodate community-based governance and implementation in resource poor African countries – and what Africa can share with the rest of the world about community-driven IFM. The workshop brings together delegates from international organizations and African countries to discuss past training, knowledge and support that has been relevant, transferable and scaleable, providing real examples of what has and has not worked, and why, as well as what we can strive towards in the years ahead. Key speakers will be joined by rapid-fire presentations from African country participants before we move into an open session, writing up lessons learned.

Chair: **Val Charlton** | Workshop co-ordination LANDWORKS, South Africa

Speakers: **Bill DeGroot** | Fire Danger and Fire Behaviour specialist /Canadian Forest Service (Retired)

Tim Murphy | USFS IP Africa Program

Natasha Ribeiro | Professor in the Department of Forest Engineering, Eduardo Mondlane University, Mozambique

11:30 AM - 1:00 PM | **Stakeholder Engagement**
S. João Room | E-Poster Presentations

PP14 (IWFC283)- WILDFIRE POLICIES ACROSS COUNTRIES: IDENTIFYING

GOALS, INSTRUMENTS, AND IMPLEMENTING ACTORS

Gabriela Huidobro¹, Lukas Giessen¹, Sarah L. Burns^{1,2}

¹Technical University of Dresden, Dresden, Germany, ²Universidad Nacional de la Plata, La Plata, Argentina

PP15 (IWFC510) - INSTITUTIONAL ARRANGEMENTS LED BY CIVIL SOCIETY ORGANIZATIONS THAT CONTRIBUTE TO FIRE PROTECTION AND FIRE MANAGEMENT IN MEXICO.

Rossana Landa¹, Juan Frausto¹

¹Fondo Mexicano Para La Conservación De La Naturaleza, Coyoacán, Mexico

PP16 (IWFC42) - ASSESEMENT OF FOREST FIRE VIDEO MONITORING AND SURVEILLANCE SYSTEM OPERATORS ATTENTION FROM EEG SIGNAL

Kristina Zovko¹, Ljiljana Šerić¹, Assement of forest fire video monitoring and surveillance system operators attention from EEG signal Damir Krstinić¹, Assement of forest fire video monitoring and surveillance system operators attention from EEG signal Petar Šolić¹, Assement of forest fire video monitoring and surveillance system operators attention from EEG signal Toni Perković¹

¹Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split, Split, Croatia

PP17 (IWFC5) - A COMPREHENSIVE HEALTH & SAFETY PROGRAM FOR WILDLAND FIREFIGHTERS

Kerry Kuehl¹

¹Oregon Health & Science University, Portland, USA

PP18 (IWFC99) - WHERE ARE THE WOMEN IN BRAZIL'S FIRE MANAGEMENT SCENARIO? WORKING TOWARDS GENDER EQUITY IN FIRE RISK GOVERNANCE

Ana Violato Espada¹, Marcelo Siqueira de Oliveira, Camila de Souza Lobo, Lara Steil

¹U.S. Forest Service International Programs Brazil, Alter do Chão/Santarém, Brazil

PP19 (IWFC472) - VOLUNTEER AND COMMUNITY BRIGADES: EXPERIENCES FROM THE 1ST MEETING OF BEST PRACTICES IN VOLUNTEERING IN PROTECTED AREAS IN BRAZIL

Helaine Saraiva Matos¹, Angela Pellin², Jayleen Vera¹, Suelene Couto¹, Marcelo Siqueira de Oliveira¹

¹U.S. Forest Service International Programs, Brasília, Brazil, ²IPÊ - Instituto de Pesquisas Ecológicas, Niterói, Brazil

PP20 (IWFC347) - SOCIAL VULNERABILITY AND WILDFIRE OCCURRENCE IN THE CONTERMINOUS US (1984-2018): CONSIDERATIONS FOR RISK MANAGEMENT

Miranda Mockrin¹, Ronald Schumann, Richelle Winkler, Julia Petersen

¹USDA Forest Service, Northern Research Station, Catonsville, United States

PP21 (IWFC523) - (RN21) - PROMOTING NATURAL RESIN TO IMPROVE FOREST RESILIENCE

Joana Vieira, M. Marques¹, A. Marques¹, Carlos Fonseca^{1,3}, R. Rodrigues¹

¹ForestWISE – Collaborative Laboratory for Integrated Forest & Fire Management, Quinta de Prados, Campus da UTAD, 5001-801 Vila Real, Portugal, ²Center for Functional Ecology, Department of Life Sciences, University of Coimbra, Calçada Martim de Freitas, 3000-456 Coimbra, Portugal, ³CESAM and Department of Biology, Campus de Santiago, University of Aveiro, 3810-193 Aveiro, Portugal

PP22 (IWFC284) - PARTICIPATIVE METHODOLOGIES TO DESIGN PUBLIC POLICIES TOWARDS ENERGY TRANSITION: THE CASE OF THERMAL ENERGY WITH FOREST BIOMASS

Amélia Branco, Idalina Dias Sardinha, Ricardo Rodrigues¹, Sandra Faustinho

¹ISEG - Lisbon School of Economics and Management, Portugal

PP23 (IWFC32) - KEY GOVERNANCE PRACTICES THAT FACILITATE THE USE OF REMOTE SENSING INFORMATION FOR FIRE MANAGEMENT IN SOUTHERN EUROPE

Ana Prados¹, Camila Rodriguez², Dan Green²

¹University of Maryland, Baltimore Co., Baltimore, United States, ²NASA, Washington, United States

PP24 (IWFC141) - CO-CREATING ADAPTATION PATHWAYS TO WILDLAND FIRE IN CATALONIA

Kathleen Uyttewaal^{1,2}, Núria Prat Guitart¹, ER (Lisa) Langer³, Fulco Ludwig², Carolien Kroeze²

¹Pau Costa Foundation, Barcelona, Spain, ²Wageningen University & Research, Wageningen, Netherlands, ³Scion, Christchurch, New Zealand

PP25 (IWFC348) - BUILDING BRIDGES FOR PREVENTION AND TIMELY RESPONSE TO FOREST FIRES IN GUARAYOS REGION, BOLIVIA

Karen Mendoza¹, Laurenz Romero¹, Juan Pablo Baldiviezo¹, Nataly Ascarrunz¹

¹Instituto Boliviano De Investigacion Forestal, Santa Cruz de la sierra, Bolivia, Plurinational State of America

PP26 (IWFC493) - INDIGENOUS WOMEN IN THE CONSERVATION OF ANCESTRAL KNOWLEDGE OF FOREST FIRE IN MICHOACÁN, MEXICO.

Erika Garduño-Mendoza¹, Diego Rafael Perez Salicrup

¹Iies-unam, Morelia, México

PP27 (IWFC34) - MAPPING THE ROLES OF MULTIPLE STAKEHOLDERS IN FIRE MANAGEMENT IN GHANA'S FOREST AND TRANSITION LANDSCAPE

Isaac Nunoo¹, Mercy Owusu Ansah, Joseph Asante, Eric Osei, Boakye Twumasi-Ankrah

¹Tropenbos Ghana, Kumasi, Ghana

OC17 (IWFC479) - REMOTE TRAINING ABOUT WILDFIRES: ONLINE COURSES OF

THE UNITED STATES NATIONAL FOREST FIRE COORDINATION GROUP (NWCG) APPLIED IN BRAZIL

Helaine Saraiva Matos¹, Jayleen Vera¹, Marcelo Siqueira de Oliveira¹, Suelene Couto¹, Lorena Brewster¹

¹U.S. Forest Service International Programs, Brasilia, Brazil

OC14 (IWFC156)- TOWARDS FIRE-SMART LANDSCAPES – GLOBAL EXPERIENCES AND KEY LESSONS

Nick Pasiecznik¹, Johann Georg Goldammer, Bibiana Bilbao, Atiek Widayati¹, Harifidy Rakoto Ratsimba, **Rosalien Jezeer**¹

¹Tropenbos International, Ede, The Netherlands

OC15 (IWFC252) - LANDSCAPE FIRE MANAGEMENT IN THE WESTERN BALKANS – JOINT EFFORTS FOR REGIONAL LANDSCAPE FIRE RESILIENCE

Cvetan Nikolovski¹, Marija Sterjovska¹, Nikola Nikolov²

¹Farmahem, Skopje, North Macedonia, ²Regional Fire Monitoring Centar, Skopje, North Macedonia

OC16 (IWFC335) - USAID/US FOREST SERVICE SOUTH AMERICA REGIONAL FIRE PROGRAM SUPPORT FOR STANDARD INTERAGENCY FIRE MANAGEMENT QUALIFICATION SYSTEMS

Isidoro Solis¹, Naomi Mills², Jayleen Vera³, Óscar Rodríguez⁴, Juan Ramón⁵, Franco Pinatte⁶,

Henrique Costa⁷

¹U.S. Forest Service - International Programs, USA, ²U.S. Forest Service - International Programs, USA, ³U.S. Forest Service - International Programs, USA, ⁴U.S. Forest Service - International Programs, Mexico, ⁵U.S. Forest Service - International Programs, Mexico, ⁶U.S. Forest Service - International Programs, Perú, ⁷U.S. Forest Service - International Programs, Perú

OC18 (IWFC426) - FIRE MANAGEMENT ASSESSMENT IN BRAZIL: STATUS OF INTEGRATED FIRE MANAGEMENT AND WILDFIRES IN BRAZIL

Marcelo Siqueira de Oliveira¹, **Henrique Costa**¹, Isidoro Solis¹, Jayleen Vera¹, Rafael Aguado¹, Forrest Behm^{1,2}, Helaine Matos¹

¹USFS - Office of International Programs, ²USFS - Payette National Forest

OC19 (IWFC103) - EGIF INTERNATIONAL EXCHANGE PROGRAM. THREE COUNTRIES AND FIVE ORGANIZATIONS SHARING VISIONS AND EXPERIENCES ON CHILEAN FIRE SCENARIOS

Juan Caamaño Azcárate¹, Jorge Saavedra¹

¹Pau Costa Foundation, Spain

OC20 (IWFC48) - CURRENT OPPORTUNITIES AND CHALLENGES FOR WILDFIRE RISK REDUCTION IN WESTERN EUROPE

Hugo Lambrechts¹, Marta Serra, Fulco Ludwig, Carolien Kroeze, Spyridon Paparrizos, Cathelijne Stoof, Eduard Plana

¹Wageningen University and Research, Wageningen, Netherlands

11:30 AM - 1:00 PM | **International Cooperation**

Arrábida Room | Oral Communications

Chair: **Johann Georg Goldammer** | Director, Global Fire Monitoring Center (GFMC), DE

1:00 PM – 2:30 PM | **Lunch****Ground Floor**2:30 PM - 4:00 PM | **International Cooperation****Arquivo Room** | Thematic Session

The session will discuss: International long-term commitment to fields such as standards of operation, training, cross-border cooperation and knowledge sharing. Promoting international mechanisms assuring a cross-sectoral approach to landscape fire management getting participating countries to follow a common set of guiding principles. Sharing good practices from around the world.

Chair: **Johann Georg Goldammer** | Director, Global Fire Monitoring Center (GFMC), DE

Keynote Speakers: **Esra Buttanri** | OSCE

Julia Haas | Forest Europe Secretariat LUBo

Gavrill Xanthopoulos | Hellenic Agricultural Organization “Dimitra”, Institute Of Mediterranean Forest Ecosystems

Panelists: **Gary Morgan** | Chairperson, Government of Victoria’s Ministerial Advisory Committee on Wildland Fire Risk, AU

Lara Stell | Fire Management Officer, Forestry Division Food and Agriculture Organization of the United Nations

2:30 PM - 4:00 PM | **Preparation & Prevention****Infante Room** | Thematic Session

The session will discuss: Implementing initiatives that reduce exposure and vulnerability to landscape fires, and also make for best safety practices at the community level. Taking stock of the plural use of resources, considering priorities and current hazard conditions.

Chair: **Gordon Sachs** | United States Forest Service

Keynote Speakers: **Paulo Fernandes** | Researcher, University of Trás-os-Montes and Alto Douro, PT

Owen Price | University of Wollongong, AU

Panelists: **José Manuel Duarte da Costa** | President of the Portuguese Civil Protection Agency

Humberto Rosa | Director for Biodiversity, DG Environment, European Commission

7:30 PM | **Book Presentation Fire Science: From Chemistry to Landscape Management****D. Maria Room** | Cultural Session2:30 PM - 4:00 PM | **Communication****D. Luís Room** | Oral Communications

Chair: **Eduardo Simões** | Integrated Researcher at DINÂMIA’CET-ISCTE

OC21 (IWFC505) - THE IMPORTANCE OF DATA IN DISASTER MANAGEMENT: A LOOK AT VOST PORTUGAL’S INITIATIVES IN REAL-TIME INFORMATION SHARING AND DISINFORMATION PREVENTION

Isabel Silva¹, **João Ribeiro**^{1,2}, Marco Maia¹, Jorge Gomes¹

¹VOST PT, Portugal, ²CEG-IST

OC22 (IWFC217) - RISK COMMUNICATION EFFECTIVENESS TO MITIGATE HUMAN-CAUSED RURAL FIRES: THE MENTAL MODEL APPROACH APPLIED IN TWO EUROPEAN UNION PROJECTS

Mayara Souza^{1,2}, **Abílio Pereira Pacheco**^{3,1,2}, Jorge Grenha Teixeira^{1,2}, José M. C. Pereira⁴, Maria Inês Lago¹

¹Faculty of Engineering of the University of Porto, Porto, Portugal, ²INESC TEC, Porto, Portugal, ³ForestWISE, Collaborative Laboratory for Integrated Forest & Fire Management, Vila Real, Portugal, ⁴Forest Research Centre, School of Agriculture, University of Lisbon, Lisbon, Portugal

OC23 (IWFC29) - WHAT CAN WE LEARN FROM COMMUNITY-BASED WILDFIRE INITIATIVES? A CASE FOR MORE SITUATED APPROACHES TOWARDS LIVING WITH WILDFIRE

Isabeau Ottolini¹

¹Open University of Catalonia, Barcelona, Spain

OC24 (IWFC445) - WILDFIRE RISK COMMUNICATION VIA NEWS MEDIA: BRIDGING THE GAP BETWEEN JOURNALISTS’ APPROACHES AND SCIENTIFIC CREDIBILITY

Stefan Doerr¹, Dr. Cristina Santin²

¹Swansea University, United Kingdom, ²Spanish National Research Council - University of Oviedo, Mieres, Spain

OC25 (IWFC39) - EDUCATING FOR PREPAREDNESS: A REVIEW OF WILDFIRE EDUCATIONAL MATERIAL WORLDWIDE

Renata Martins Pacheco¹, Catarina Sequeira, Iryna Skulska, Conceição Colaço

¹Ceabn/isa

OC26 (IWFC449) - REGIONAL EASTERN AFRICA FIRE MONITORING RESOURCE CENTER: THE ROLE OF OPEN ACCESS SPATIAL TOOLS FOR STAKEHOLDER ENGAGEMENT IN FIRE MANAGEMENT

Harifidy Rakoto Ratsimba¹, Gaston Hedwigino Tahintsoa¹, Dimby Raherinjatovoarison¹, Haritiana Zacaharie Rakotoarinivo¹, Rajira Nambinintsoa Ratsimandresy¹, Johann Georg Goldammer²

¹LLanddev Research Lab, Antananarivo, Madagascar, ²Global Fire Monitoring Center, Freiburg, Germany

OC27 (IWFC324) - EXAMINING BUSHFIRE PREPAREDNESS AND COMMUNITY RESILIENCE IN THE CHANGING SOCIAL LANDSCAPE OF HALLS GAP, AUSTRALIA

Gabrielle Miller¹, Andrea Rawluk¹

¹The University Of Melbourne, Parkville, Australia

2:30 PM - 4:00 PM | **Technical Innovation****S. João Room** | E-Poster PresentationsChair: **Carlos Viegas** | SIM4SAFETY**PP28 (IWFC408) - 3D- FINE-SCALE FUEL CLASSIFICATION FROM TERRESTRIAL POINT CLOUDS USING ARTIFICIAL INTELLIGENCE****Diego Laino**¹, Carlos Cabo^{3,1}, Celestino Ordonez³, Stefan Doerr¹, Cristina Santin^{2,1}¹Centre For Wildfire Research, Swansea University, Swansea, United Kingdom, ²Research Institute of Biodiversity (IMIB, CSIC - University of Oviedo - Principality of Asturias), Mieres, Spain, ³Dept. of Mining Exploitation and Prospecting, University of Oviedo, Oviedo, Spain**PP29 (IWFC176) - THE USE OF RPAS TECHNOLOGIES AS AN INTELLIGENCE AND HUMAN RESOURCE TOOL DURING ACTIVE WILDFIRES.****George Leblanc**¹, Gabriela Ifimov¹, Margaret Kalacska², Juan Pablo Arroyo-Mora¹, Oliver Lucanus²¹National Research Council Canada, Ottawa, Canada, ²Applied Remote Sensing Laboratory, McGill University, Quebec, Canada**PP30 (IWFC185) - SEMI-AUTONOMOUS ROBOTIC PLATFORMS FOR FOREST FUEL MANAGEMENT AND FIRE FIGHTING****Carlos Viegas**¹, Sérgio Cruz², Maria Araújo³, João Ruas², Francisco Cruz², Tiago Gameiro², Tiago Pereira², Daniela Ferreira³, Mihail Babcsinski², Jacinto Reis³¹Bold Robotics Lda., Coimbra, Portugal, ²University of Coimbra, Coimbra, Portugal, ³Jacinto Marques de Oliveira Sucrs Lda., 184, R. do Campo Grande 132, 3885-530 Esmoriz, Portugal**PP31 (IWFC517) - PATCH MOSAIC BURNING IN VENEZUELA - AN EXAMPLE OF TRADITIONAL KNOWLEDGE TRANSFERRED TO GOVERNMENT PRACTICE****Bibiana Bilbao**¹, Magister Adriana Millán, General Miguel Matany Luque, Lieutenant Colonel (B) José Biskys Ardila, First Commander Germán Gutiérrez, Carlos Méndez-Vallejo, Roberto Rivera-Lombardi, Lieutenant Colonel (B) Elías León, Dr Rosalba Gómez-Martínez, Lic. Efrain León¹Universidad Simón Bolívar, Caracas, Venezuela, Bolivarian Republic of Venezuela**PP32 (IWFC140) - A SEGMENTATION APPROACH FOR AUTOMATIC MONITORING OF BURNED AREA USING SENTINEL-2 IMAGERY**Sílvia Catarino¹, João M. N. Silva¹, **Alana K. Neves**¹, Manuel L Campagnolo¹, Valentine Aubard², Duarte Oom³, Renata Libonati^{1,4}, José Miguel Cardoso Pereira¹¹Forest Research Centre, School of Agriculture, University of Lisbon, Tapada da Ajuda, Lisboa, Portugal, ²French National Institute for Agriculture, Food, and Environment (INRAE), Aix-en-Provence, France, ³European Commission, Joint Research Centre, Ispra Site, Ispra, Italy, ⁴Department of Meteorology, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil**PP33 (IWFC60) - MANAGING EMERGENCIES WITH A XR VIRTUAL SITUATION ROOM****Gustavo Medina del Rosario**¹, Francisco Prieto¹The Singular Factory Group LLC, Miami, USA**PP34 (IWFC177) - CO-CREATION OF KNOWLEDGE AND TOOLS TO SUPPORT BETTER DECISION-MAKING IN FIRE SUPPRESSION IN PORTUGAL****Aki Benali**¹, Fábio Silva², Ana C.L. Sá¹¹Instituto Superior De Agronomia, Portugal, ²Força Especial de Emergência e Proteção Civil, Portugal**PP35 (IWFC67) - GLOBAL TO LOCAL: NASA'S FIRE INFORMATION FOR RESOURCE MANAGEMENT SYSTEM (FIRMS) SUPPORTING INTEGRATED FIRE MANAGEMENT****LANCE Operations Manager Diane Davies**¹, Jenny Hewson¹, Veerachai Tanipat³, Brad Quayle², Otmar Olsina¹, Asen Radov¹, Greg Ederer¹¹NASA GSFC, Greenbelt, USA, ²USDA Forest Service, Salt Lake City, USA, ³Kasetsart University, Bangkok, Thailand**PP36 (IWFC458) - FORECASTING METEOROLOGICAL FIRE DANGER WITH A STATISTICAL MODEL OF FIRE RADIATIVE POWER****Sílvia A. Nunes**¹, Carlos C. DaCamara¹, Ricardo M. Trigo¹, Isabel F. Trigo², Celia M. Gouveia², Renata Libonati³, Liz Belém³¹IDL, Faculdade de Ciências, Universidade de Lisboa, Lisboa, Portugal, ²Instituto Português do Mar e da Atmosfera, Portugal, ³Departamento de Meteorologia, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil**PP37 (IWFC340) - CLIMATE CHANGE MITIGATION IN AFRICA : MAIN GREENHOUSE GAZ EMITTED ACCORDING TO FIRE SEASONS IN GUINEAN SAVANNA (WEST AFRICA)****Aya Brigitte N'Dri**¹, Aka Jean-Noel Kpré¹, Coulibaly Losseny¹¹Laboratory of Ecology and Sustainable Development / Laboratory of Botany and Valorisation of Plant diversity, Faculty of Natural Sciences, Abidjan, Côte d'Ivoire**PP38 (IWFC286) - ASSESSMENT AND ENHANCEMENT OF OPERATIONAL WILDFIRE MODELING****Dr. Adrian Cardil**¹, Joaquín Ramirez¹, Santiago Monedero¹, Philip SeLegue², Sergio de-Miguel³, Geoff Marshall², Tim Chavez², Scott Purdy¹, Raul Quilez¹, Carlos Alberto Silva⁴¹Technosylva Inc, La Jolla, San Diego, USA, ²CAL FIRE Sacramento HQ Intel, Sacramento, USA, ³Department of Crop and Forest Sciences, University of Lleida, Lleida, Spain, ⁴Forest Biometrics and Remote Sensing Laboratory (Silva Lab), School of Forest, Fisheries, and Geomatics Sciences, University of Florida, Gainesville, USA**PP39 (IWFC218) - ARBARIA: ARTIFICIAL INTELLIGENCE FOR WILDLAND FIRE PREDICTION AND ASSESSMENT.****Celia García Feced**¹, José Cubo María¹, Faustino Sánchez García²¹Wildland Fire Management Service - Ministry for the Ecological Transition and the Demographic Challenge, Madrid, Spain, ²SG Information and Communication Technologies - Ministry of Agriculture, Fisheries and Food, Madrid, Spain**PP40 (IWFC94) - AN OVERVIEW OF THE NASA ADVANCED CAPABILITIES FOR**

EMERGENCY RESPONSE OPERATIONS PROJECT

Marcus Johnson¹¹NASA Ames Research Center, Moffett Field, United States

PP41 (IWFC183) - A WEB-BASED OPERATIONAL WILDFIRE MONITORING AND DECISION-SUPPORT TOOL - FEB MONITORIZAÇÃO (FM)

Alexandre Penha¹, Carlos Mota¹, Fábio Silva¹¹ANEPC, Portugal2:30 PM - 4:00 PM | **Stakeholder Engagement****Arrábida Room** | Oral CommunicationsChair: **Sarah McCaffrey** | US Forest Service (Retired)

OC28 (IWFC508) - IMPROVING WILDFIRE PREPAREDNESS: LESSONS FROM A SCHOOL RADIO EDUCATIONAL PROGRAM

Jose Azevedo¹, **Fantina Maria Tedim¹**, Isabel Reis¹, Miguel Midões¹, Filipa Pereira¹, Ivone Santos¹, Susana Neves¹, João Barreiros¹, Raquel Torres¹¹Porto University, Portugal

OC29 (IWFC52) - MONCHIQUE'S INNOVATION LABORATORY - A SPACE FOR DIALOGUE AND KNOWLEDGE SHARING TO FOSTER COMMUNITY-BASED DISASTER RISK REDUCTION IN FOREST-PRONE AREAS

Maria Partidário, **Joana Dias¹**, Guilherme Saad, Ana Soares, Isabel Loupa Ramos, Rute Martins, Margarida Monteiro¹Instituto Superior Técnico, Lisbon, Portugal

OC30 (IWFC13) - WATER UTILITY RISK PERCEPTIONS AND ENGAGEMENT IN WILDFIRE MITIGATION ACTIVITIES IN WATERSHEDS IN THE WESTERN UNITED STATES

Kelly Jones¹, Julie Padowski², Melinda Morgan³¹Colorado State University, Fort Collins, United States, ²Washington State University, Pullman, United States, ³University of New Mexico, Albuquerque, United States

OC31 (IWFC175) - ADDRESSING EQUITY AND JUSTICE IN INTEGRATED WILDFIRE RISK MANAGEMENT

Eduard Plana¹, Thomas Schinko², Claudia Berchtold³, John Handmer², Teresa Deubelli-Hwang², JoAnne Linnerooth-Bayer², Eva Preinfalk², Anna Scolobig², Marta Serra¹¹Forest Science And Technology Centre Of Catalonia, Spain, ²International Institute for Applied Systems Analysis (IIASA), Austria, ³Fraunhofer Institute for Technological Trend Analysis INT, Germany

OC32 (IWFC481) - CLIMATE-ADAPTED FIRE RISK MANAGEMENT: AN INTEGRATED PORTFOLIO APPROACH FOR THE SOUTHWESTERN USA

Acting Director, Sw Climate Adaptation Science Center Carolyn Enquist¹¹US Geological Survey, Southwestern US, United States

OC33 (IWFC344) - A PARTICIPATORY METHODOLOGICAL APPROACH FOR POLICY DESIGN IN THE FOREST SECTOR

Sandra Valente¹, Alexandra Marques¹, Marta Martins¹, Carlos Fonseca¹¹ForestWISE, Vila Real, Portugal

OC34 (IWFC419) - BUILDING INDIGENOUS FIRE MANAGEMENT IN SOUTH AMERICA. THE EXPERIENCES OF PARUPA INTERNATIONAL NETWORK & CIR (RORAIMA INDIGENOUS COUNCIL), BRAZIL.

Vincenzo Lauriola¹, Sineia Bezerra do Vale²¹Mcti Ministerio de Ciencia Tecnologia & Inovação, Brasília, Brazil, ²CIR Conselho Indígena de Roraima, Boa Vista, Brazil4:00 PM - 4:30 PM | **Coffee Break****Exhibition Area** | Ground Floor4:30 PM - 6:00 PM | **Stakeholder Engagement****Arquivo Room** | Thematic Session

The session will discuss: How the complexity of landscape fire management might call for new models of engaging multiple stakeholders, including regulatory bodies, industry experts, scientists, researchers and local communities. Laying ground for more participatory procedures allowing for discussion and negotiation at all jurisdictional levels.

Chair: **Michael Czaja** | American Red Cross Volunteer and Affiliate Appointment, Colorado State UniversityKeynote Speaker: **Sarah McCaffrey** | US Forest Service (Retired)**Egbert Schram** (remote) | CEO, Hofstede InsightsPanelists: **Natasha Ribeiro** | Professor in the Department of Forest Engineering, Eduardo Mondlane University, Mozambique**Richard de Neufville** | Professor of Engineering Systems in the Institute for Data, Systems, and Society at the Massachusetts Institute of Technology, USA4:30 PM - 6:00 PM | **Global Wildland Fire Network (GWFN) - Use Cases****Infante Room** | Workshop

The Global Wildland Fire Network (GWFN) session will provide an opportunity to brief conference participants on the advancements of the work of in the 14 Regional Wildland Fire Networks and the eight Regional Fire Management Resource Centers. Following the format of the IWFCs since 2003, the regional coordinators/chairs of the GWFN provide a regional statement and a poster (displayed in a separate poster session), which summarize the developments in the regions between the last and the current IWFC.

The session aims at providing a focused, straightforward overview of the GWFN. Additional emphasis is on presenting selected best cases of successful and sustainable Integrated Fire Management (IFM) / governance projects / activities that show successful and sustainable

application of IFM principles.

Chair: **Johann Georg Goldammer** | Director, Global Fire Monitoring Center (GFMC), DE

Oyunsanaa Byambasuren | National Forest Agency of Mongolia

Speakers: **Lucy Amissah** | Forestry Research Institute of Ghana, Council For Scientific and Industrial Research

Harifidy Rakoto Ratsimba | Head of Regional Eastern Africa Fire Management Resource Center (REAFMRC)

Sundar Sharma | Undrr-south Asia Wildland Fire Network

Bambang Hero Saharjo | Faculty of Forestry, Bogor Agricultural University (IPB), Indonesia

Sergiy Zibtsev | Regional Eastern Europe Fire Monitoring Center

Nikola Nikolov | Head of Regional Fire Monitoring Center

Elena Hernández Paredes | Ministry For The Ecological Transition And Demographic Challenge, ES

Gavriil Xanthopoulos | Hellenic Agricultural Organization “Dimitra”, Institute of Mediterranean Forest Ecosystems

Harald Vacik | University of Natural Resources and Life Sciences

Mariana Senra de Oliveira | Analista ambiental, Ibama/prevfogo

Daniel Segura | Ministerio del Ambiente, Agua y Transición Ecológica del Ecuador

Diego Román | Coordinator of the National Fire Management Program – SINAC-MINAE National Commission on Forest Fires (CONIFOR)

David Nugent | Director Fire, Environment, Land and Water at Parks Victoria

Jerome Perez | US Forest Service

4:30 PM - 6:00 PM | **Wildfire Women Group**

D. Maria Room | Workshop

Objectives: To discuss and strengthen women’s role, participation, and inclusion in integrated fire management worldwide. To raise awareness about challenges women face both working with, and as leaders in integrated fire management; To share data, experiences, and to inspire people regarding women’s role in wildfires prevention and response; To promote international networks and mentorship between women; To promote country-based gender focused opportunities.

Chair: **Ana Violato Espada** | U.S. Forest Service International Programs Brazil

Speaker: **Erika Garduño-Mendoza** | IIES-UNAM

4:30 PM - 6:00 PM | **Insurances: Impact on Public Policies and a nudging instrument**

D. Luís Room | Workshop

The session will discuss: The available insurance models and their applicability.

The relationship between public policies and insurances and their impact on risk management funding and mitigation measures.

Chair: **Val Charlton** | Workshop co-ordination LANDWORKS, South Africa

Speakers: **Karina Whalley** | Head of Public Sector AXA Climate

Moses Khangale | Stakeholder Programs Manager, Santam Insurance

Panelist: **Antoine Bavandi** | Global Head of Public Sector, Parametric & Climate Resilience Solutions, Gallagher Re

4:30 PM - 6:00 PM | **Communication**

S. João Room | E-Poster Presentations

Chair: **Cristina Santin** | Swansea University

PP42 (IWFC474) - DROUGHT, FIRE AND LENTIBULARIACEAE: A CASE STUDY IN THE PANTANAL OF MATO GROSSO DO SUL - BRAZIL

Ranielly Garcia-Silva¹, Wener Hugo Arruda Moreno², **Maria Ana Farinaccio¹**

¹Universidade Federal De Mato Grosso Do Sul, Corumbá, Brazil, ²Instituto Homem Pantaneiro, Corumbá, Brazil

PP43 (IWFC354) - THE PANTANAL 2020 FIRE CRISIS: THE IMPACTS OF TRANSPORTED SMOKE ON AIR QUALITY IN THE LARGEST SOUTH AMERICAN MEGACITY.

Djacinto Monteiro Dos Santos¹, Renata Libonati^{1,2}, Judith J. Hoelzemann³, Aline M. Oliveira¹, Ediclê S. F. Duarte⁴, Julia A. Rodrigues¹, Philipp Franke^{5,6}, Anne Caroline Lange^{5,6}, Elmar Friese^{5,6}, Fabio de O. Roque^{7,8}, Leonardo F. Peres¹

¹Departamento de Meteorologia, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil, ² Instituto Dom Luiz (IDL), Faculdade de Ciências, Universidade de Lisboa, 1749 016, Lisboa, Portugal, ³Department of Atmospheric and Climate Sciences/Graduate Program in Climate Sciences, Federal University of Rio Grande do Norte, DCAC/PPGCC/UFRN, Natal, Brazil, ⁴University of Évora - Institute of Earth Sciences, Portugal, ⁵Institute for Energy and Climate Research – Troposphere (IEK-8), Forschungszentrum Jülich, Germany, ⁶Rhenish Institute for Environmental Research at the University of Cologne, Germany, ⁷Universidade Federal de Mato Grosso do Sul, Caixa Postal 549, Campo Grande, Brazil, ⁸Center for Tropical Environmental and Sustainability Science (TESS) and College of Science and Engineering, James Cook University, Cairns, QLD 4878, Australia

PP44 (IWFC388) - THE CREATION OF THE FIRE MUSEUM AS AN ENVIRONMENTAL MANAGEMENT INSTRUMENT INTEGRATED WITH THE CAVALCANTE ENVIRONMENTAL VOLUNTEER BRIGADE - BRIVAC

Rafael Farias, João Carlos Ribas Ramos, Renato Santos, Marcelo Trindade Santana

¹BRIVAC - Brigada Voluntária Ambiental de Cavalcante, Cavalcante, Brasil

PP45 (IWFC30) - THE INFLUENCE OF WEATHER AND CLIMATE ON THE OCCURRENCES OF FIRE OUTBREAKS IN BRAZIL

Marcelo Romão¹, Luciana Bassi Marinho Pires¹

¹World Environmental Conservancy, Atlanta, USA

PP46 (IWFC482) - THE DESIGN OF A WEBSIG PLATFORM TO SUPPORT RURAL FIRE RISK MANAGEMENT AT LOCAL LEVEL

Diogo Miguel Pinto^{1,2}, André Samora-Arvela^{1,2}, Célia Figueiras^{1,3}, Cláudia Nunes Magalhães¹, Marco Dias⁴, Master Margarida Jerónimo⁵, **Fantina Maria Tedim^{1,2}**

¹ University of Porto, Porto, Portugal, ²Centre of Studies in Geography and Spatial Planning,

Porto, Portugal, ³Barcelos City Council, Barcelos, Portugal, ⁴Góis City Council, Góis, Portugal, ⁵Seia City Council, Seia, Portugal

PP47 (IWFC2) - BURN SEVERITY CHARACTERIZATION IN WILDLAND-URBAN INTERFACE (WUI) ALONG A CLIMATIC GRADIENT IN THE SPANISH IBERIAN PENINSULA

David Beltrán Marcos¹, Susana Suárez-Seoane², José Manuel Fernández-Guisuraga¹, Víctor Fernández-García³, Leonor Calvo Galván¹

¹Area of Ecology, Biodiversity and Environmental Management Department, Faculty of Biological and Environmental Sciences, University of León, León, Spain, ²Research Unit of Biodiversity (UMIB; UO-CSIC-PA), Department of Organisms and Systems Biology (BOS; Ecology Unit), University of Oviedo, Oviedo, Spain, ³Institute of Geography and Sustainability, Faculty of Geosciences and Environment, University of Lausanne, Lausanne, Switzerland

PP48 (IWFC332) - IS SOCIETY INTERESTED IN WILDFIRES? A GOOGLE TRENDS ANALYSIS

Cristina Santin^{1,3}, Aristides Moustakas², **Stefan Doerr³**

¹Research Institute of Biodiversity, Spanish National Research Council, Mieres, Spain, ²Data Analytics Consultant, Crete, Greece, ³Centre for Wildfire Research, Swansea University, Swansea, United Kingdom

PP49 (IWFC295) - IDENTIFICATION OF LIGHTING IGNITED WILDFIRES IN BRAZIL AND PORTUGAL, BASED ON SATELLITE DATA AND CATALOG INFORMATION.

Mr Lucas Menezes¹, Renata Libonati¹, Ana Russo², Aline M. de Oliveira¹, Filipe Lemos Maia Santos¹, Rodrigo Augusto Ferreira de Souza³, Ricardo M. Trigo², Celia M. Gouveia⁶, José Miguel Cardoso Pereira⁵, Ricardo Deus⁶, Alexandre M. Ramos¹, Aki Benali⁵

¹Departamento de Meteorologia, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil, ²Universidade de Lisboa, Faculdade de Ciências, Instituto Dom Luiz (IDL), Portugal, ³Universidade do Estado do Amazonas, Escola Superior de Tecnologia, Manaus, Brazil, ⁴Universidade Federal de Mato Grosso do Sul, Campo Grande, Brazil, ⁵Forest Research Centre, School of Agriculture, University of Lisbon, Portugal, ⁶Instituto Português do Mar e da Atmosfera, Portugal

PP50 (IWFC201) - FIRST EDUCATION AND AWARENESS IDEOLOGY ON WILDFIRES IN SPAIN

Víctor M. García¹

¹TRAGSA, Madrid, Spain

PP51 (IWFC422) - FIRE SCIENCE IN THE PANTANAL WETLAND: BEFORE AND AFTER 2020 MEGA-FIRE

Alexandre de Matos Martins Pereira^{1,2}, Maxwell Oliveira¹, Francielli Bao¹, Evaldo Benedito de Souza³, Arnildo Pott¹, Anahi Cerezosimo de Souza Escobar¹, Suelen Sandin de Carvalho⁴, Geraldo Alves Damasceno Junior¹

¹Universidade Federal De Mato Grosso Do Sul, Campo Grande, Brazil, ²Instituto Brasileiro de Meio Ambiente, Campo Grande, Brazil, ³Universidade Estadual De Mato Grosso Do Sul,

Cassilândia, Brazil, ⁴Museu Paraense Emílio Goeldi, Belém, Brazil

PP52 (IWFC57) - ANALYSIS OF FIRES IN THE STATE OF ALASKA AND THEIR RELATIONSHIP TO CLIMATE CHANGE

Kimberly Gabriely Silva Teixeira¹, **Marcelo Romao¹**, Luciana Bassi Marinho Pires¹

¹World Environmental Conservancy, Atlanta, USA

PP135 (IWFC151) - SMOKE RESPECTS NO BOUNDARIES

Air Resource Specialist Peter Lahm¹

¹USDA Forest Service, Washington, United States

4:30 PM - 6:00 PM | **Prevention & Pre-Suppression**

Arrábida Room | Oral Communications

Chair: **Owen Price** | University of Wollongong

OC35 (IWFC243) - SIMULATION OF PYROCUMULUS DURING A MEGAFIRE EVENT IN PORTUGAL USING A COUPLED ATMOSPHERE-FIRE SPREAD MODELING FRAMEWORK

Ricardo Vaz¹, Rui Silva¹, Susana Cardoso Pereira¹, Ana Carvalho¹, David Carvalho¹, Alfredo Rocha¹

¹University Of Aveiro, Aveiro, Portugal

OC36 (IWFC325) - CAN PRESCRIBED BURNS REDUCE AREAS BURNED BY WILDFIRES AND ASSOCIATED GREENHOUSE GAS EMISSIONS?

Dr Livia Moura¹, Caio Sena², Julia Rodrigues², Leonardo Peres², Renata Libonati², Julia Boock³, Osvaldo Gajardo³, Daniel Silva³, Isabel Schmidt⁴

¹Institute Society, Population And Nature, Brasília, Brazil, ²Laboratório de Aplicações de Satélites Ambientais (LASA/UFRJ), Rio de Janeiro, Brazil, ³World Wide Fund for Nature (WWF/Brasil), Cuiabá e Brasília, Brazil, ⁴Department of Ecology, University of Brasília (UnB), Brasília, Brazil

OC37 (IWFC33) - WILDFIRE OCCURRENCE IN FOREST AND TRANSITIONS LANDSCAPES OF GHANA: FARMERS' PERCEPTIONS AND ADAPTATION STRATEGIES

Isaac Nunoo¹, Mercy Owusu Ansah, Joseph Asante, Eric Osei, Boakye Twumasi-Ankrah

¹Tropenbos Ghana, Kumasi, Ghana

OC38 (IWFC314) - LANDSCAPE FIRE AND SMOKE EXPOSURE: CURRENT KNOWLEDGE OF THE PRESCRIBED BURNING TRADE-OFF

Owen Price¹, Michael Storey

¹University of Wollongong, Wollongong, Australia

OC39 (IWFC450) - FIREBREAK EFFECTIVENESS PREDICTION MODELS DEVELOPED FROM REAL WILDFIRES IN SOUTHERN SPAIN

Macarena Ortega Pardo¹, Francisco Rodríguez y Silva¹, Juan Ramón Molina¹

¹University Of Cordoba, Cordoba, Spain

OC40 (IWFC165) - A 2023 UPDATE OF THE POSITION PAPER ON “WILDFIRE PREVENTION IN THE MEDITERRANEAN”**Eduard Mauri¹**, Elena Hernández Paredes², Irene Núñez Blanco³, Celia García Feced²¹European Forest Institute, Mediterranean Facility (EFIMED), Barcelona, Spain, ²Spanish

Ministry for the Ecological Transition and Demographic Challenge (MITECO), Madrid, Spain,

³Grupo Tragsa, Madrid, Spain**OC41 (IWFC302) - BUILDING A WILDLAND FIRE PREVENTION AND MITIGATION MODEL IN CANADA TO GROW WHOLE-OF-SOCIETY AWARENESS AND ENGAGEMENT.**Magda Zachara, **Ray Ault¹**¹CIFFC, Winnipeg, Canada**4:30 PM - 7:45 PM | Incentivizing savanna management: challenges and opportunities****Porto Room** | Workshop

The session will discuss: The profile of international undertakings focusing on the status of current incentivized savanna and rainforests fire management activities and associated challenges and opportunities. The difficulties of fighting fires in tropical forests and plan actions to protect these ecosystems.

Chair: **Jeremy Russell-Smith** | International Savanna Fire Management Initiative**6:15 PM - 6:45 PM | IAWF Award****Arquivo Room****6:15 PM - 7:45 PM | Social Participation and Local Fire Governance through International Networks****Infante Room** | Workshop

The session will discuss: The participatory roles of various players required for local governance of fire and landscape management using a community-based model of the International Model Forest Network that integrates practitioners, scientists and policy-makers. Collaborative examples from Latin America and the Mediterranean regions are presented.

Chair: **Chelene Hanes** | Wildland Fire Scientist, Natural Resources CanadaSpeakers: **Bill DeGroot** | Fire Danger and Fire Behaviour specialist Canadian Forest Service (Retired)**Judi Beck** | Director General, Canadian Forest Service**Natasha Jurko** | Natural Resources Canada - Canadian Forest Service**Pierre-Jonathan Teasdale** | Director of Trade and International Affairs Division within the Canadian Forest Service (CFS), Natural Resources Canada**Toni Ventre** | Forest Engineer, Director of the Forestry Sector of the Valdarno and Valdisieve Union of Municipalities**Natalia Ruiz-Guevara** | Co-Chair of the Latin American Model Forest Network**6:15 PM - 7:45 PM | Post-fire Assessment and Management Workshop****D. Maria Room** | Workshop

The presenters will describe methods to evaluate post-wildfire risk to public safety, communities, infrastructure, and natural resources, and discuss approaches to mitigate post-fire risks, with examples from North America and Europe.

Chair: **Scott Dehnisch** | US Agency For International Development/Bureau For Humanitarian AssistanceSpeakers: **Dave Callery** | Deputy National Post-Fire Program Leader**Cara Sponaugel** | National Post-fire Program Leader for the United States Forest Service**Corina Cerovski-Darriau** | USGS-USAID Landslides Hazards Advisor and Landslide Disaster Assistance Team**6:15 PM - 7:45 PM | Training and education needs to guide future integrated fire management****D. Luís Room** | Workshop

Amidst increasing calls for integrated fire management there is a growing realization of the need for people that are well trained to make this change. Integrated fire management involves making connections between people, disciplines, countries, academia and practice, an inter- and transdisciplinary type of working that is different from the monodisciplinary education that is provided at most schools and universities around the world. In this interactive workshop, we aim to bring people together from a wide variety of backgrounds, regions and disciplines to discuss and synthesize the diversity of skills, knowledges and language needed from our future experts in integrated fire management. To create a diverse overview of the needs of future employers, we specifically welcome participants who work in emergency services, governments, land management agencies, NGOs and companies from all levels of seniority (junior, medior and senior). The results of this needs assessment will be used to guide current and future education needs in integrated fire management

Chairs: **Cathelijne Stoof** | Assistant Professor Wageningen University, NL**Julissa Galarza** | Wageningen UniversitySpeakers: **Conceição Colaço** | Invited researcher University of Lisbon**Eduard Plana** | Head of Forest Policy and Risk Governance Ctfc**6:15 PM - 7:45 PM | Aerial Resources Management****Arrábida Room** | Workshop

The effectiveness of aerial resources; the key aspects for an aerial resource system to be designed considering the best effectiveness and efficiency (costs); best practices in aerial resources management. Investment and Finance, approaching questions such as “own fleets vs contracts” and “is aerial firefighting still a good investment on 6th generation wildfires”. The outcome improvement with Global Cooperation and Collaboration arrangements.

Speakers: **Yolanda Saldana** | US Forest Service**Richard Alder** | Principal Consultant at Avtract Solutions**Claire Kowalewski** | DG ECHO, European Commission

THURSDAY, MAY 18

9:00 AM - 11:00 AM | **Fire Risk Governance****Arquivo Room** | Plenary Session

The session will discuss: How country leaderships can develop measures in face of a systemic risk that integrate current knowledge in all aspects of landscape fire and community needs, while developing legal provisions, finance and support programs that drive not only the building of institutional structures but also active participation of civil society.

Chair: **Peter Moore** | Director of NRFC Ltd, AU

Keynote Speakers: **Elisa Ferreira** | European Commission Cohesion and Reforms

Ortwin Renn (remote) | International Institute for Advanced Sustainability Studies, (Retired)

Panelist: **Toddi Steelman** | Stanback Dean, Nicholas School of the Environment Duke University, USA

11:00 AM - 11:30 AM | **Coffee Break****Exhibition Area** | Ground Floor11:30 AM - 12:15 PM | **Waterax****Porto Room** | Industry Session11:30 AM - 1:00 PM | **OECD Flagship Report Launch: Adapting to a changing climate in the management of extreme wildfires****Arquivo Room** | Thematic Session

Recent extreme wildfire events have caused unprecedented damages and impacts on communities, economies, and the environment. Climate change is a key driver behind the growing occurrence of extreme wildfires. Under projected warming, wildfire frequency and severity are estimated to increase, calling for a fundamental shift in wildfire management to focus on climate change adaptation and wildfire risk prevention. In the past years the OECD has worked to bring together an assessment of wildfire risks in the context of climate change to shed light on the potentially irreversible impacts extreme wildfires may trigger. It worked together with countries to assess how wildfire management policies and practices have responded to the changes in wildfire risk patterns. The OECD report summarises the main findings of this work. It presents recommendations that aim at informing countries' policy progress towards building climate resilience to extreme wildfires.

In this session the OECD will launch its flagship report, entitled Taming Wildfires in the Context of Climate Change. Key findings will be presented and discussed in a high-level policy panel.

Keynote Speaker: **Jo Tyndall** | OECD Environment Director

Ana Abrunhosa | Minister of Territorial Cohesion, Portugal

Christos Stylianides (video) | Minister for Climate Crisis and Civil Protection, Greece

Walid Oueslati | Acting Head of the OECD Climate, Biodiversity and Water DivisionPanelists: **Catherine Gamper** | Climate Change Adaption, OECD**Julienne Morissette** | Director, Wildland Fire Research, Northern Forestry Centre, Canadian Forest Service**Florian Rudolf-Miklau** | Head of Forestry and Sustainability Division, Federal Ministry of Agriculture, Forestry, Regions and Water Management, Austria**Stefan Doerr** | Professor of Wildland Fire Science, Swansea University11:30 AM - 1:00 PM | **Pre-suppression & Suppression****Infante Room** | Thematic Session

The session will discuss: Crossing qualification and training programs with suppression needs, deploying the most qualified and up-to-date personnel, depending on the specific needs of the operation. Using risk assessments to guide decisions and implementing standard command and control systems. Suppressing fire with the best techniques available, integrating knowledge from prevention agencies.

Chair: **Patricio Sanhueza** | ILC

Keynote Speaker: **Marc Castellnou** | Fire chief Catalan Fire and Rescue Service, SP

Panelists: **Gordon Sachs** | United States Forest Service

Alen Slijepcevic | Country Fire Authority, AU

Luís Lopes | City Council of Leiria, PT

11:30 AM - 1:00 PM | **Adaptive Management****D. Luís Room** | Oral Communications

Chair: **Toddi Steelman** | Stanback Dean, Nicholas School of the Environment Duke University, USA

OC43 (IWFC5169) - IDENTIFYING TRAFFIC STRATEGIES FOR WILDFIRE EVACUATIONS USING PAST BEHAVIOUR OF EVACUEES**Stephen Wong***¹University Of Alberta, Edmonton, Canada***OC44 (IWFC199) - WE ARE FIRE: INDIGENOUS FIRE PRACTICES IN THE SASKATCHEWAN RIVER DELTA**Renee Carriere, Solomon Carriere, Natasha Caverley, **Amy Cardinal Christianson¹***¹Parks Canada, Canada***OC45 (IWFC365) - COLLECTIVE ACTION IN PRESCRIBED BURNING: A SOCIAL NETWORK ANALYSIS OF TWO US STATES****Aaron Russell¹**, Research PI Omkar Joshi*¹Oklahoma State University, Stillwater, United States***OC46 (IWFC255) - SCENARIOS FOR SUSTAINING COMMUNITY-BASED WILDLAND FIRE MANAGEMENT STRUCTURES IN THE TRANSITION AND SAVANNAH ZONES OF GHANA**

Joana Akua Serwaa Ameyaw¹, Lucy Amissah², Shalom Addo-Danso², Mike Sefa Boachie¹, Francis Siibu Nimbaje¹, Akosua Acheampomaa Sefah¹

¹Faculty of Renewable Natural Resources, Kwame Nkrumah University Of Science And Technology, Kumasi, Ghana, ²Forestry Research Institute of Ghana, Council for Scientific and Industrial Research, Kumasi, Ghana

OC47 (IWFC357) - INDIGENOUS FIRE USE CAN FACILITATE CLIMATE ADAPTATION: CONTEMPORARY EXAMPLES

Peter Fule¹, Amanda Stan¹, Melvin Hunter, Jr.², Citlali Cortés Montaña³

¹Northern Arizona University, Flagstaff, United States, ²Hualapai Tribe, Peach Springs, United States, ³KfW Bank, Mexico City, Mexico

OC48 (IWFC96) - SOCIAL NETWORK ANALYSIS (SNA) AND ADAPTIVE CO MANAGEMENT TO FOREST FIRES: A CASE STUDY OF SERRA DE MONCHIQUE, PORTUGAL

Guilherme Saad¹, Maria do Rosário Partidário

¹Instituto Superior Técnico - IST, Lisbon, Portugal

11:30 AM - 1:00PM | **Risk Handling**

Miragaia Room | E-Poster Presentations

Chair: **Marketa Podebradska** | Global Change Research Institute CAS

PP53 (IWFC301) - DEVELOPMENT AND USE OF AN INTEGRATED MODELLING APPROACH TO SIMULATE DYNAMIC WILDFIRE RISK PROFILES AND SUPPORT RISK REDUCTION STRATEGIES

Hedwig van Delden^{1,2}, Roel Vanhout¹, Amelie Jeanneau², Holger R. Maier², Aaron Zecchin²

¹Research Institute for Knowledge Systems, Maastricht, Netherlands, ²The University of Adelaide, Adelaide, Australia

PP54 (IWFC222) - CONTAMINATION OF FIREFIGHTERS' SKIN DURING FIREFIGHTING ACTIVITIES AND ASSOCIATED HEALTH RISKS

Gabriel Sousa^{1,5}, Miss Joana Teixeira¹, Cristina Delerue-Matos¹, Bruno Sarmento³, Simone Morais¹, Xianyu Wang⁴, Francisca Rodrigues¹, Marta Oliveira

¹REQUIMTE-LAQV, Instituto Superior de Engenharia, Instituto Politécnico do Porto, R. Dr. António Bernardino de Almeida 431, 4200-072 Porto, Portugal, Porto, Portugal, ²CESPU Instituto de Investigação e Formação Avançada em Ciências e Tecnologias da Saúde, Instituto Universitário de Ciências da Saúde, Gandra, Portugal, Gandra, Portugal, ³Instituto de Investigação e Inovação em Saúde, Universidade do Porto, Porto, Portugal, Porto, Portugal, ⁴QAEHS-Queensland Alliance for Environmental Health Sciences, The University of Queensland, Brisbane, Australia, Brisbane, Australia, ⁵Faculdade de Ciências da Universidade do Porto, Porto, Portugal

PP55 (IWFC220) - IS CZECH REPUBLIC MORE LIKELY TO EXPERIENCE CONDITIONS SUITABLE FOR LARGE WILDFIRE OCCURRENCE IN THE FUTURE?

Marketa Podebradska¹, Miroslav Trnka, Bc. Jan Balek

¹Global Change Research Institute CAS, Brno, Czech Republic

PP56 (IWFC179) - WILDFIRE DECISION SUPPORT SYSTEMS FOR THE MANAGEMENT AND RESILIENCE OF REN'S POWER AND GAS INFRASTRUCTURE

João Gaspar¹, **João Ruivo Paulo²**, Rui Roda³

¹REN - Rede Elétrica Nacional, SA, Lisboa, Portugal, ²Univ Coimbra, ADAI, Department of Mechanical Engineering, Coimbra, Portugal, ³Wherecess, Lda, Lisboa, Portugal

PP57 (IWFC262) - VEGETATION FEEDBACKS MEDIATE THE VULNERABILITY OF WESTERN US CONIFER FORESTS TO FIRE-DRIVEN TRANSFORMATION

Tyler Hoecker¹

¹University Of Montana, United States

PP58 (IWFC216) - USING FLAMMAP TO ASSESS WILDFIRE BEHAVIOR IN THE BOHEMIAN SWITZERLAND NATIONAL PARK

Lucie Kudláčková¹, Marketa Podebradska, Monika Bláhová, Miroslav Trnka, Zdeněk Žalud

¹Global Change Research Institute Cas, Brno, Czech Republic

PP60 (IWFC337) - POLICY COHERENCE ANALYSIS TOWARDS INTEGRATED WILDFIRE RISK MANAGEMENT IN THE EU

Eduard Plana¹, Marta Serra¹, Annick Smeenk², Eduard Mauri³, Inazio Martinez³

¹Forest Science And Technology Centre Of Catalonia, Spain, ²Wageningen University & Research, Netherlands, ³European Forest Institute, Finland

PP61 (IWFC400) - LIGHTNING-INDUCED WILDFIRE IN BRAZILIAN CERRADO BIOME

Vanúcia Schumacher¹, Alberto Setzer, Fabiano Morelli

¹National Institute For Space Research (inpe), São José dos Campos, Brazil

PP62 (IWFC45) - HOW CAN WE DEFINE A FIRE RESILIENT LANDSCAPE?

Fiona Newman Thacker¹, Cathelijne Stoof

¹Wageningen University And Research, Wageningen, The Netherlands

PP64 (IWFC322) - FIRE PANEL: A BRAZILIAN WEBGIS APPLICATION FOR FIREFIGHTERS DISPATCH WITH NEAR REAL TIME RESOLUTION

Henrique Bernini¹, Daniela de Faria¹, Elisama Oliveira¹, José de Paula Assis¹, Richard Ribeiro¹, Tadeu Sanchez², Leonardo Dias³, Bruno Cambraia⁴, Marcelo Carvalho²

¹Operations And Management Center Of The Amazon Protection System (censipam), Porto Velho, Brazil, ²Rondônia state Fire Departament, Porto Velho, Brazil, ³Roraima state Fire Departament, Boa Vista, Brazil, ⁴Chico Mendes Institute of biodiversity Conservation (ICMBio), Porto Velho-RO, Brasil

PP65 (IWFC146) - CREATING GRIDDED FIRE PROBABILITY MAPS USING NASA DATA

Emily Gargulinski¹, Amber Soja¹, Elizabeth Wiggins², Noam Rosenthal³, Andrew Engler³

¹National Institute Of Aerospace, United States, ²NASA Langley Research Center, United States, ³Kettle, United States

PP66 (IWFC190) - COMPOUND DROUGHT-HEATWAVE CONDITIONS: A NEW THREAT FOR THE FIRE-PRONE CERRADO?

Patrícia S. Silva¹, João L. Geirinhas¹, Julia Rodrigues², Renata Libonati^{2,1}

¹Universidade de Lisboa, Faculdade de Ciências, Instituto Dom Luiz, Lisboa, Portugal, Lisbon, Portugal, ²Departamento de Meteorologia, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil, Rio de Janeiro, Brazil

PP67 (IWFC253) - COUPLING FUEL MODELS AND FOREST MANAGEMENT FOR ASSESSING FIRE HAZARD IN EUCALYPT PLANTATIONS

Luis Acevedo Munoz¹, André Duarte¹, Sérgio Maggioli², Sérgio Fabres¹, Nuno Borralho¹, João Melo Bandeira²

¹RAIZ - Forest and Paper Research Institute, Aveiro, Portugal, ²Navigators Forest Portugal, Sétubal, Portugal

11:30 AM - 1:00 PM | **Planning and Preparation**

S. João Room | E-Poster Presentations

Chair: **Andrew Johnson** | University of California, Berkeley

PP68 (IWFC425) - WILDFIRE HAZARD MAPPING IN THE MEDITERRANEAN: A HARMONIZED APPROACH.

Andrea Trucchia¹, Mr Giorgio Meschi¹, Umberto Pernice^{2,1}, Paolo Fiorucci¹

¹Cima Research Foundation, Savona, Italy, ²University of Rome La Sapienza, Rome, Italy

PP69 (IWFC59) - IMPACTS AND SCALE-UP POTENTIALS OF INTEGRATED FIRE MANAGEMENT IN THE BRAZILIAN CERRADO

Dr Jonas Franke¹, Ana Carolina Sena Barradas, Anja Hoffmann, Lara Steil, Rosa Maria Roman Cuesta

¹Remote Sensing Solutions GmbH, Munich, Germany

PP70 (IWFC521) - SCENARIO PLANNING TO SUPPORT THE NATIONAL FUEL MANAGEMENT PLAN IN PORTUGAL

Alan Ager¹, Bruno Aparicio², Fermín Alcasena³, Michelle Day¹, Chris Ringo⁴, Cody Evers⁵

¹USDA Forest Service, Rocky Mountain Research Station, Missoula Fire Sciences Laboratory, 5775 US Highway 10W, Missoula, MT, 59808, USA, , United States, ²Forest Research Centre, School of Agriculture, University of Lisbon, , Portugal, ³Department of Agricultural and Forest Engineering, Universitat de Lleida, Lleida, 25003, , Spain, ⁴Oregon State University, Department of Crop and Soil Science, 109 Crop Science Building, Corvallis, OR, 97331, USA, United States, ⁵Portland State University, Department of Environmental Science and Management, 1719 SW 10th Avenue, Portland, OR, 97201, USA, , United States

PP71 (IWFC279) - CALIFORNIA FUEL BREAKS: ALTERNATIVE METRICS OF SUCCESS

Candidate Andrew Johnson¹, Brandon Collins¹

¹University of California, Berkeley, Berkeley, United States

PP72 (IWFC383) - DEVELOPING A HOLISTIC, RISK-WISE STRATEGY FOR EUROPEAN WILDFIRE MANAGEMENT - PRELIMINARY RESULTS OF FIREURISK RESEARCH

Professor Cristina Vega¹, Professor Emilio Chuvieco², George Eftychidis³, Professor Ioannis

Gitas³, Matthias Forkel⁴, Sébastien Lahaye⁵, Kirsten Thonicke⁶, Klelia Petrou⁷, Marta Gómez Gimenez⁸, **Professor Domingos Viegas⁹**

¹University of Lleida, Lleida, Spain, ²University of Alcalá, Alcalá de Henares, Madrid, Spain, ³Aristotelian University of Thessaloniki, Thessaloniki, Greece, ⁴Technische Universität Dresden, Dresden, Germany, ⁵SAFE Cluster, Aix en Provence, France, ⁶Potsdam Institut für Klimafolgenforschung e.V. (PIK), Potsdam, Germany, ⁷CERIDES - Center of Excellence of European University Cyprus, Nicosia, Cyprus, ⁸GMV Aerospace and Defence S.A.U., Tres Cantos, Madrid, Spain, ⁹ADAI, University of Coimbra, Coimbra, Portugal

PP73 (IWFC132) - WILDFIRE IMPACT ANALYSIS OF PORTUGAL'S BUILT ENVIRONMENT CONSIDERING CLIMATE CHANGE SCENARIO

Luana Tesch¹, Hélder D. Craveiro¹, Helena Gervásio¹, Aldina Santiago¹

¹University of Coimbra, IISSE, Department of Civil Engineering, Coimbra, Portugal

PP74 (IWFC116) - THE POSTFIRE ANALYSIS AS A METHODOLOGY FOR PREPAREDNESS IN WILDFIRE MANAGEMENT

Jose Luís Soriano Sancho¹, Miguel Angel Botella Martínez¹, Agustín Cervera Montero¹, Daniel Orozco Bagou¹, Ricardo García Post²

¹Unidad Técnica de Análisis y Prevención de Incendios (VAERSA, Generalitat Valenciana), Spain, ²Dirección General de Prevención de Incendios Forestales. Generalitat Valenciana, Spain

PP75 (IWFC38) - VALIDATING A LANDSCAPE FUEL METRIC TO MAP EXPOSURE TO HAZARDOUS FUELS IN PORTUGAL

Sidra Ijaz Khan¹, Conceição Colaço¹, Francisco Castro Rego¹, Jen Beverly²

¹University of Lisbon, Lisbon, Portugal, ²University of Alberta, Edmonton, Canada

PP76 (IWFC329) - INTEGRATIVE FIRE MANAGEMENT FOR THE WORLD'S LARGEST CONTINUOUS TROPICAL WETLAND IS URGENTLY NEED FOR THE PANTANAL BIODIVERSITY AND HUMAN POPULATION

Letícia Garcia¹, Judit Szabo², Fábio de Oliveira Roque³, Alexandre Pereira⁴, Catia Cunha⁵, Geraldo Damasceno-Junior⁶, Ronaldo Morato⁷, Walfrido Tomas⁸, Prof Renata Libonati⁹, Danilo Ribeiro¹⁰

¹Laboratório Ecologia da Intervenção (LEI), Instituto de Biociências (INBIO), Universidade Federal de Mato Grosso do Sul (UFMS), Campo Grande, Brazil, ²College of Engineering, IT and Environment, Charles Darwin University, Darwin, Australia, ³Instituto de Biociências, Universidade Federal de Mato Grosso do Sul, Campo Grande, Brazil, ⁴Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (IBAMA), Campo Grande, Brazil, ⁵Universidade Federal de Mato Grosso (UFMT); (CPP), (INAU), Cuiabá, Brazil, ⁶Instituto de Biociências, Universidade Federal de Mato Grosso do Sul, Campo Grande, Brazil, ⁷Instituto Chico Mendes de Conservação da Biodiversidade (ICMBio) - Centro Nacional de Pesquisa e Conservação de Mamíferos Carnívoros, Atibaia, Brazil, ⁸Empresa Brasileira de Pesquisa Agropecuária (Embrapa Pantanal), Corumbá, Brazil, ⁹Departamento de Meteorologia, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil, ¹⁰Instituto de Biociências, Universidade Federal de Mato Grosso do Sul, Campo Grande, Brazil

PP77 (IWFC486) - LONG-TERM STRENGTHENING OF COMMUNITY-SCALE FIRE MANAGEMENT IN MÉXICO

Juan Frausto¹, **Rossana Landa**

¹Fondo Mexicano Para La Conservación De La Naturaleza, Ciudad de México, México

PP78 (IWFC145) - IMPACTS OF CLIMATE CHANGE AND HUMAN POPULATION GROWTH ON WILDFIRE POTENTIAL IN THE TROPICS: THE TAIN II FOREST RESERVE IN GHANA.

Eric Osei-Kwarteng¹

¹Resource Management Support Centre(RMSC)-Forestry Commission of Ghana, Kumasi, Ghana

PP79 (IWFC399) - FIRE AS A TOOL IN THE MANAGEMENT OF THE GUAPORÉ BIOLOGICAL RESERVE, A CONSERVATION UNIT IN THE BRAZILIAN AMAZON

Wilhan Assunção¹, Lidianne Silva¹

¹Instituto Chico Mendes De Conservação Da Biodiversidade, Ji-Paraná, Brazil

PP80 (IWFC313) - EFFICIENT STRATEGIES TO PREVENT LARGE FOREST FIRES IMPLEMENTED A BRAZILIAN INDIGENOUS LAND

Francinete Correa Pacheco¹, Rodrigo Falleiro

¹NEF/IBAMA/MA

PP81 (IWFC285) - EXPLORING WILDFIRE SUSCEPTIBILITY MODELS FOR AGRICULTURAL LAND USE AREAS IN PORTUGAL

Juan Guerra-Hernández¹, Aki Benali¹, Ana C.L. Sá¹

¹Instituto Superior de Agronomia, Portugal

PP82 (IWFC407) - A GLOBAL PERSPECTIVE ON THE WILDLAND-URBAN INTERFACE (WUI) WILDFIRE TOPIC

Claudio Ribotta¹, Lara Steil², Peter Moore²

¹INRAE - French National Research Institute for Agriculture, Food and Environment, Aix-en-Provence, France, ²Forestry Division - Food and Agriculture Organization of the United Nations (FAO), Rome, Italy

PP83 (IWFC303) - 2022 WILDFIRE OPERATION IN BRAZIL'S XERENTE AND FUNIL INDIGENOUS LAND BY PREVFOGO/IBAMA

Gildimar Xerente¹, Danielle Danaga¹, Adiel Smiwaibu Xerente¹, Waner Gonçalves Lima¹

¹PREVFOGO/IBAMA, Palmas, Brazil

11:30 AM - 1:00 PM | **Post-Fire Intervention**

Arrábida Room | Oral Communications

Chair: **Jacob Keizer** | Researcher, University of Aveiro

OC49 (IWFC381) - EFFECT OF FIRE DISTURBANCE ON SOIL RESPIRATION AND NITROGEN AVAILABILITY IN BOREAL FOREST OF CHINA.

Tongxin Hu¹

¹Northeast Forestry University, Harbin, China

OC50 (IWFC528)- HOW EUCALYPTUS GLOBULUS AND ACACIA LONGIFOLIA

BEHAVE AFTER-FIRE IN PORTUGAL?

Cristina Mágoas¹, Andreia Anjos^{1,2}, Joana Jesus^{1,2}, Cristina Marques³, Nuno Borralho³, Helena Trindade², Sergio Chozas², Florian Ulm²

¹Universidade de Lisboa, Faculdade de Ciências, Departamento de Biologia Vegetal, Lisboa, Portugal, ²cE3c - Centre for Ecology, Evolution and Environmental Changes, Faculdade de Ciências, Universidade de Lisboa, 1749-016 Lisboa, Portugal, Lisboa, Portugal, ³RAIZ - Forest and Paper Research Institute, Eixo, Portugal

OC51 (IWFC387) - SOCIO-ECONOMIC AND ENVIRONMENTAL IMPLICATIONS OF WILDFIRE ASH. A GLOBAL DATASET OF CHEMICAL CHARACTERISTICS

Carmen Sánchez-García¹, Cristina Santín^{1,2}, Jonay Neris^{1,3}, Gabriel Sigmund⁴, Xose L. Otero⁵, Joella Manley¹, Gil González-Rodríguez⁶, Claire Belcher⁷, Artemi Cerdá⁸, Abbey Marcotte⁹, Sheila Murphy¹⁰, Charles C. Rhoades¹¹, Prof. Gary Sheridan¹², Tercia Strydom¹³, Pete R. Robichaud¹¹, Stefan Doerr¹

¹Swansea University, Swansea, United Kingdom, ²UMIB-CSIC, Mieres, Spain, ³Universidad de La Laguna, La Laguna, Spain, ⁴University of Vienna, Vienna, Austria, ⁵Universidad de Santiago de Compostela, Santiago de Compostela, Spain, ⁶Universidad de Oviedo, Oviedo, Spain, ⁷University of Exeter, Exeter, United Kingdom, ⁸Universitat de València, Valencia, Spain, ⁹Wageningen University, Wageningen, The Netherlands, ¹⁰U.S. Geological Survey, Boulder, USA, ¹¹U.S. Department of Agriculture Forest Service, , USA, ¹²The University of Melbourne, Parkville, Australia, ¹³South African National Parks, Skukuza, South Africa

OC52 (IWFC213) - POST-FIRE WATER CONTAMINATION RISK ASSESSMENT IN PORTUGAL: FRISCO PROJECT

Luís Dias¹, Joana Parente¹, Joao Nunes^{1,2}, Aki Benali³, Oscar González-Pelayo⁵, Ana C.L. Sá³, Dina Jahanianfard³, Niels Nitzsche¹, Joost Schuurman², Jantiene Baartman², Carlos Brito⁴

¹cE3c - Center for Ecology, Evolution and Environmental Changes & CHANGE - Global Change and Sustainability Institute, Faculdade de Ciências da Universidade de Lisboa, Portugal, Lisbon, Portugal, ²Soil Physics and Land Management Group, Wageningen University & Research, the Netherlands, Wageningen, the Netherlands, ³Forest Research Centre (CEF), Instituto Superior de Agronomia, University of Lisbon, Portugal, Lisbon, Portugal, ⁴AdP Valor, Grupo Águas de Portugal, Portugal, Lisbon, Portugal, ⁵Centre of Environmental and Marine Studies (CESAM), University of Aveiro, Portugal, Aveiro, Portugal

OC53 (IWFC207) - POST-FIRE SOIL EROSION MITIGATION TREATMENTS: A GLOBAL COST-EFFECTIVENESS ANALYSIS

Antonio Girona-García¹, Carolla Cretella², Cristina Fernández³, Pete R. Robichaud⁴, Diana Vieira⁵, Jacob Keizer⁶

¹Biodiversity Research Institute (IMIB), CSIC-UniOvi-PA, Mieres, Spain, ²School of Life Sciences and Environmental Technology (ALST), Avans University of Applied Sciences, Breda, The Netherlands, ³Centro de Investigación Forestal-Lourizán, Xunta de Galicia, Pontevedra, Spain, ⁴U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Moscow, United States of America, ⁵European Commission, Joint Research Centre (JRC), Ispra, Italy, ⁶University of Aveiro, Aveiro, Portugal

OC54 (IWFC368) - CHANGES IN SOIL WATER REPELLENCY CAUSED BY FOUR

2021-2022 WESTERN U.S. MEGA FIRES

Vera Samburova^{1,3}, Shelby Inouye², Palina Bahdanovich^{1,3}, Kevin Axelrod^{1,3}, Brad Sion¹, Markus Berli², Hans Moosmüller¹

¹Desert Research Institute, Reno, United States, ²Desert Research Institute, Las Vegas, United States, ³University of Nevada, Reno, Reno, United States

OC77 (IWFC433) - POST-FIRE RECOVERY IN PORTUGAL: 100 YEARS IN FLASHBACK, 10 YEARS TO MOVE FORWARD

João Pinho¹, António Patrão¹

¹Instituto da Conservação da Natureza e das Florestas, Lisbon, Portugal

1:00 PM – 2:30 PM | **Lunch**

Ground Floor

2:30 PM - 3:15 PM | **Pegasus**

Porto Room | Industry Session

2:30 PM - 4:00 PM | **Forest & Economy - Public Policies**

Arquivo Room | Thematic Session



The session will discuss: Public policies that create incentives to develop new or renewed economic activities in rural land, in a sustainable way. Policies to foster governance models that close the gap between multiple jurisdictions, bringing communities closer to the planning process, promoting economic growth which in turn makes rural land more managed and less prone to landscape fires. How to bring together economy and conservation.

Chair: **Pedro Lencart** | Director at Antarr, PT

Keynote Speaker: **Jelle Behagel** | Wageningen University & Research, AU

Panelists: **Felipe Gonzalez** (remote) | Former President of the Spanish Government; President of the Foundation Felipe Gonzalez

Ismail Belen | Senior Agriculture and Forests Expert, General Directorate of Nature Conservation and National Parks of the Ministry of Agriculture and Forests, Turkey

Juan Cabandié | Argentine Minister of Environment

2:30 PM - 4:00 PM | **Post-Fire Intervention**

Infante Room | Thematic Session



The session will discuss: Deployment of post-fire initiatives reducing impacts such as loss of top-soil layers, flooding, landslides and land erosion, allowing for land restoration. Recovering communities affected by landscape fires, making them more resilient to future events.

Chair: **Jacob Keizer** | Researcher, University of Aveiro

Keynote Speaker: **Hugh Safford** | Vibrant Planet, and University Of California Davis

Panelists: **Scott Dehnisch** | US Agency For International Development/Bureau For Humanitarian Assistance

Nuno Banza | President of the Board of Directors, ICNF

Stefan Doerr | Full professor Centre For Wildfire Research, Swansea University

2:30 PM - 4:00 PM | **Planning & Preparation**

D. Luís Room | Oral Communications

Chair: **Lara Steil** | Fire Management Officer Forestry Division Food and Agriculture Organization of the United Nations

OC55 (IWFC268) - STATE OF KNOWLEDGE, FUTURE CHALLENGES AND OPTIONS FOR AN INTEGRATED FIRE MANAGEMENT IN THE EUROPEAN ALPS

Harald Vacik¹, Mortimer M. Müller, Marco Conedera, Gianni Boris Pezzatti, Giorgio Vacchiano, Yvon Duche, Rolando Rizzolo, Boštjan Kosicek, Dr. Sébastien Lahaye, Christian Schunk, Michael Sautter, Augusto Cotterchio, Daniele Ryser, Sylvain Dupire, Aron Ghiringhelli, Peter Ondrich, Walter Wuggenig, Vila Vilardel, Trung Hoang, Christian Mayer

¹University of Natural Resources and Life Sciences, Vienna, Austria

OC56 (IWFC01) - THE AUSTRALIAN FIRE DANGER RATING SYSTEM

Stuart Matthews¹, Rob Rogers¹, Simon Heemtra², **Meaghan Jenkins**

¹NSW Rural Fire Service, Sydney Olympic Park, Australia, ²AFAC, East Melbourne, Australia⁴

OC57 (IWFC506) - THE EFFECTS OF PRESCRIBED FIRES ON LIZARD DIVERSITY IN GRASSLANDS OF CENTRAL BRAZIL

Bruna Gomes¹, Professor Marcio Martins¹

¹University of São Paulo, São Paulo, Brazil

OC58 (IWFC225) - COMMUNITY FIRST: GOVERNMENT, FIRE AGENCIES, AND COMMUNITIES, LEARNING, DECIDING AND ADAPTING TOGETHER AS PART OF A BUSHFIRE RISK REDUCTION SYSTEM

Stefanie Russell¹

¹Country Fire Authority, Melbourne, Australia, ²Victorian State Government, Melbourne, Australia

OC60 (IWFC31) - PEERING INTO THE FUTURE: IDENTIFICATION OF EMERGING WILDFIRE RISK HOTSPOTS DUE TO CHANGES IN CLIMATE AND POPULATION IN WESTERN AUSTRALIA

Amelie Jeanneau¹, Prof. Hedwig van Delden^{1,2}, Holger R. Maier¹, Aaron Zecchin¹, Roel Vanhout², Tim McNaught³, Mike Wouters⁴

¹The University Of Adelaide, Adelaide, Australia, ²Research Institute for Knowledge Systems, Maastricht, the Netherlands, ³Department of Fire and Emergency Services, Perth, Australia, ⁴Department for Environment and Water, Adelaide, Australia

OC61 (IWFC280) - ASSESSING DIRECTIONAL VULNERABILITY TO WILDFIRE - IMPLICATIONS FOR COMMUNITY PROTECTION PLANNING

Jen Beverly¹, Air Forbes¹

¹University of Alberta, Edmonton, Canada

2:30 PM - 4:00 PM | **Prevention and Pre-Suppression**

Miragaia Room | E-Poster Presentations

Chair: **Stefano Macrelli** | University of Bologna

PP84 (IWFC210) - FIRE PROGRESSION IN NORTHWEST EUROPE : REMOTELY SENSED REGIME AND DRIVERS

Tomás Quiñones¹, Adrian Cardil¹, Santiago Monedero¹, Joaquín Ramirez¹, Sergio de Miguel²

¹Tecnosylva, León, Spain, ²Universitat de Lleida, Lleida, Spain

PP85 (IWFC427) - INSIGHTS FROM THE FIRESMART PROJECT: A SUMMARY FOR POLICYMAKERS

Adrián Regos¹, FirESmart Team Judit Lecina-Díaz, João C. Campos, Silvana Pais, Claudia Car

¹Biopolis/cibio, Portugal

PP86 (IWFC256) - WEATHER-BASED INDICATORS OF FIRE RISK PERCEPTION ACROSS PORTUGAL HIGHLIGHT POSITIVE CHANGES AND IMPROVE PREVENTION PLANNING AT REGIONAL TO LOCAL SCALES.

Yannick Le Page¹, Bruno Pereira¹, Mario Monteiro¹, Sara Mieiro dos Santos¹, Tiago M Oliveira¹

¹Agency for Integrated Rural Fire Management, Lousã, Portugal

PP87 (IWFC271) - CONTRIBUTION OF PRESCRIBED FIRE TO WILDFIRE PREVENTION IN THE TROPICAL SAVANNAS OF CAMPOS AMAZÔNICOS NATIONAL PARK, AMAZON REGION, BRAZIL.

Bruno Cambraia¹, Doctor Christian Berlinck², Doctor Daniel Alves³

¹ICMBio, Porto Velho, Brazil, ²ICMBio, Atibaia, Brazil, ³Universidade Estadual do Paraná, União da Vitória, Brazil

PP88 (IWFC321) - THE ROLE OF CIVIL SOCIETY ORGANIZATIONS TO REDUCE WILDFIRES IN BRAZIL: THE EXAMPLE OF PANTANAL BRIGADES PROGRAM

Ananda Andrade^{1,2}, Leonardo Gomes¹, João Scremin Dias^{1,2}

¹Sos Pantanal, Campo Grande, Brazil, ²Universidade de Brasília, Brasília, Brazil

PP90 (IWFC494) - SLEEP QUALITY ASSESSMENT OF PROFESSIONAL FIREFIGHTERS FROM NORTHEAST OF PORTUGAL

Sara Alves^{1,2}, Student Filipa Esteves^{3,4,5}, Francisca Silva⁶, Felisbina Queiroga⁶, Solange Costa^{7,8,9}, Klara Slezakova⁹, Maria José Alves^{11,12}, Maria Carmo Pereira, João Teixeira^{5,6,8}, Simone Morais¹⁰, Josiana Vaz^{1,11,12}, Adília Fernandes^{1,13}

¹Instituto Politécnico de Bragança, Bragança, Portugal, ²Universidade Católica Portuguesa,

Porto, Portugal, ³National Institute of Health, Environmental Health Department, Porto,

Portugal, ⁴EPIUnit - Instituto de Saúde Pública da Universidade do Porto, Porto, Portugal,

⁵Faculty of Medicine, University of Porto, Department of Public Health and Forensic Sciences, and Medical School, Porto, Portugal, ⁶UTAD - Universidade de Trás os Montes e Alto Douro,

⁷Faculty of Medicine, University of Porto, Department of Public Health and Forensic Sciences,

and Medical School, Porto, Portugal, ⁸Laboratório para a Investigação Integrativa e Translacional em Saúde Populacional (ITR), Porto, Portugal, ⁹LEPABE, Departamento de Engenharia Química, Faculdade de Engenharia, Porto, Portugal, ¹⁰REQUIMTE LAQV, Instituto Superior de Engenharia, Porto, Portugal, ¹¹Centro de Investigação de Montanha (CIMO), Instituto Politécnico de Bragança, Portugal, ¹²Laboratório Associado para a Sustentabilidade e Tecnologia em Regiões de Montanha (SusTEC), Instituto Politécnico de Bragança, Portugal, ¹³Unidade de Investigação em Ciências da Saúde: Enfermagem (UICISA: E), Escola Superior de Saúde de Coimbra, Portugal

PP91 (IWFC88) - REDUCING HUMAN-CAUSED WILDFIRE IGNITIONS: USING SOCIAL SCIENCE TO UNDERSTAND RISK MANAGEMENT PREFERENCES IN THE U.S. SOUTHWEST

Catrin Edgeley¹, Alexander Evans², Sarah Devenport¹, Gabe Kohler²

¹Northern Arizona University, Flagstaff,, United States, ²Forest Stewards Guild, Santa Fe, United States

PP92 (IWFC300) - OPERATIONAL CLASSIFICATION OF SMOKE PLUMES FOR EARLY WARNING: START OF WILDFIRE OR FALSE ALARM?

Stefano Macrelli

¹Department of Physics and Astronomy - University of Bologna, Italy

PP93 (IWFC288) - NEW CLASSIFICATION METHODS FOR THE FWI SYSTEM

Chelene Hanes¹, Mike Wotton², Natasha Jurko¹

¹Great Lakes Forestry Centre, Canadian Forest Service, Natural Resources Canada, Sault Ste. Marie, Canada, ²University of Toronto / Natural Resources Canada, Toronto, Canada

PP94 (IWFC171) - NATIONAL WILDFIRE PREPAREDNESS PROGRAM: A FORWARD-LOOKING INITIATIVE FOR INTERAGENCY COORDINATION

Elena Hernández Paredes¹, Ángela Iglesias Rodrigo¹, Ignacio Bustamante López-Chicheri²

¹Ministry For The Ecological Transition And Demographic Challenge, Madrid, Spain,

²TRAGSATEC, Madrid, Spain

PP95 (IWFC24) - MEDIUM-TERM RESULTS OF PRESCRIBED BURNING MANAGEMENT IN BRAZILIAN INDIGENOUS LANDS

Marcelo Trindade Santana¹, Rodrigo Falleiro², Charles Pereira Pinto², Pedro Paulo Xerente²

¹National Federation of Family Farmers and Rural Family Entrepreneurs, Brasília, Brazil,

²Brazilian Institute of the Environment and Renewable Natural Resources, Brasília, Brazil

PP96 (IWFC128) - LINEAR FIREBREAK INFRASTRUCTURES IN THE VALENCIAN COMMUNITY. UPDATING OF THE WIDTH CALCULATION METHODOLOGY.

Miguel Angel Botella Martínez¹, M^a Jesús Barberà Bisbal¹, Ricardo García Post², Jose Luís Soriano Sancho¹, Agustín Cervera Montero¹, Daniel Orozco Bagou¹, Miguel Estéfano Olaiz¹, Juan Luis Arribas Cobo³, Francisco Navarro Baixauli³, Gracia Sapiña Salom³

¹Unidad Técnica de Análisis y Prevención de Incendios Forestales (VAERSA, Generalitat

Valenciana), Valencia, Spain, ²Dirección General de Prevención de Incendios Forestales,

Generalitat Valenciana, Valencia, Spain, ³Departamento de Proyectos (VAERSA, Generalitat

Valenciana), Valencia, Spain

PP97 (IWFC258) - INTEGRATED FIRE MANAGEMENT (IFM) IMPLEMENTATION AND OUTCOMES IN THE INDIGENOUS LAND OF PARQUE DO ARAGUAIA

Waner Gonçalves Lima¹, Danielle Danaga, Gildimar Xerente

¹Ibama - Instituto Brasileiro Do Meio Ambiente E Dos Recursos Naturais Renováveis, Palmas, Brazil

PP98 (IWFC273) - IMPROVING AN INTEGRATED FIRE DANGER ASSESSMENT WITH HIGH RESOLUTION VEGETATION PARAMETERS

Harald Vacik¹, Mortimer M. Müller, Markus Immitzer, Gergö Dioszegi, Clement Atzberger, Markus Hollaus, Ruxandra-Maria Zotta, Wouter Arnoud Dorigo

¹University of Natural Resources and Life Sciences, Vienna, Austria

PP99 (IWFC47) - ANALYSIS AND EVALUATION OF FOREST FIRE VIDEO MONITORING AND SURVEILLANCE EFFECTS- CASE STUDY OF CROATIAN FIRE DETECT AI

Ljiljana Šerić¹, Stipe Pletikosić¹, Selena Knežić Buhovac¹

¹University Of Split, Fesb, Split, Croatia

2:30 PM - 4:00 PM | **Adaptive Management**

S. João Room | E-Poster Presentations

Chair: **Shelby Corning** | International Institute Of Applied Systems Analysis

PP100 (IWFC230) - “MITIGATION, ADAPTATION OR SUFFERING” IN RELATION TO WILDLAND FIRE

Fiona Newman Thacker¹, Kathleen Uyttewaal^{1,2}, Tomás Quinones³, Cathelijne Stoof¹, Rik Leemans¹, Stacey Frederick⁴

¹Wageningen University And Research, Wageningen, Netherlands, ²Pau Costa Foundation, Barcelona, Spain, ³Tecnosylva, Leon, Spain, ⁴American Wildfire Experience, United States

PP101 (IWFC234) - HOW DEMOGRAPHIC CHANGES IMPACT ON WILDFIRE REGIME

Juan José Fernández¹, Rubén Chamorro González², Juan Antonio Muñoz Navarro²

¹INOCAM / Forest Fires Unit, Toledo, Spain, ²INOCAM / Analysis and Planning Unit, Toledo, Spain

PP102 (IWFC376) - WHAT'S THE POINT? REFLECTING ON GOALS & EVALUATION IN WILDFIRE MANAGEMENT

Eric Kennedy¹

¹York University, Toronto, Canada

PP103 (IWFC484) - FIRE FORESTRY ACCIDENTS IN GALICIA

Fernando Iglesias Rey¹, Jorge Raposo^{2,3}, **Gilberto Vaz^{2,3}**, Daniela Alves², Alberto Rojo¹

¹Universidad de Santiago de Compostela, Campus de Lugo, Escuela Politecnica Superior,

Lugo, Espanha, ²Univ Coimbra, ADAI, Department of Mechanical Engineering, Coimbra, Portugal, ³Coimbra Polytechnic - ISEC, Coimbra, Portugal

PP104 (IWFC159) - EDUCATION FOR COMMUNITIES AND LOCAL ADMINISTRATIONS. INTRODUCING AND UNDERSTANDING A CIRCULAR MODEL ABOUT HOW TO LIVE WITH FIRE.

Felipe Alarcon¹, Herbert Haltenhoff¹

¹WildfireFT, Santiago, Chile

PP105 (IWFC100) - FIRST INDIGENOUS WOMEN VOLUNTEER WILDLAND FIRE BRIGADE IN BRAZIL: FROM SPECTATORS TO EFFECTIVE AGENTS OF INTEGRATED FIRE MANAGEMENT

Ana Violato Espada¹, Mariana Senra De Oliveira, Pedro Paulo Xerente, Dinalice Xerente, Marcelo Siqueira de Oliveira, Maíz dAssumpção

¹U.S. Forest Service International Programs Brazil, Alter do Chão/Santarém, Brazil

PP107 (IWFC485) - WILDFIRE ADAPTIVE MANAGEMENT TO REDUCE WILDFIRE RISK IN PORTUGAL: BENEFITS, OPPORTUNITIES, CHALLENGES, AND BARRIERS

Fantina Maria Tedim^{1,2}, Fernando Correia^{1,2}, Lucínia Aires³, Elisabete Pacheco³, Fernando Encarnação³, Catarina Coimbra⁴, Miguel Fontes⁴, Master Margarida Jerónimo⁵, Nuno Touret⁶, Nuno Rocha⁷, Joaquim Tavares⁷, Master Sara Tapa⁸, André Samora-Arvela^{1,2}, Cláudia Magalhães², Diogo Miguel Pinto^{1,2}

¹Centre of Studies in Geography and Spatial Planning, Porto, Portugal, ²Faculty of Arts of University of Porto, Porto, Portugal, ³Municipality of Odemira, Odemira, Portugal, ⁴Municipality of Odmira, Guarda, Portugal, ⁵Municipality of Seia, Seia, Portugal, ⁶Municipality of Ourém, Ourém, Portugal, ⁷Municipality of Vouzela, Vouzela, Portugal, ⁸Municipality of Ribeira de Pena, Ribeira de Pena, Portugal

PP108 (IWFC170) - TRUST AND COMPASSION IN WILLINGNESS TO SHARE MOBILITY AND SHELTERING RESOURCES IN WILDFIRE EVACUATIONS

Stephen Wong, Joan Walker, Susan Shaheen

¹University Of Alberta, Edmonton, Canada

PP110 (IWFC233) - INTEGRATION OF FIRE INCIDENT MONITORING INTO ENHANCED LAW ENFORCEMENT IN MOZAMBIQUE'S CONSERVATION AREAS

Leonel Mutemba, Augusto Tembe, **Franziska Steinbruch¹**

¹Administracao Nacional Das Areas De Conservacao, Mozambique

PP111 (IWFC345) - FLAMMABLE FUTURES - A STORYLINE OF CLIMATIC AND ADAPTATION IMPACTS ON WILDFIRE EVENTS IN INDONESIA

Shelby Corning¹, Esther Boere², Andrey Krasovski¹, Andrey Lessa-Derci-Augustynczik², Florian Kraxner¹

¹Agriculture Forestry and Ecosystem Services (AFE) Group, Biodiversity and Natural Resources (BNR) Program, International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria, ²Integrated Biosphere Futures (IBR) Group, Biodiversity and Natural

Resources (BNR) Program, International Institute for Applied Systems Analysis (IIASA),
Laxenburg, Austria

2:30 PM - 4:00 PM | **Suppression and Relief**

Arrábida Room | Oral Communications

Chair: **Marc Castellnou** | Fire Chief Catalan Fire and Rescue Service, SP

OC62 (IWFC525) - I4F TECHNOLOGY FOR MAKING AERIAL FIREFIGHTING MORE EFFECTIVE

Agoston Restas¹

¹University of Public Service, Institute of Disaster Management. 1101 Budapest, Hungaria krt. 9-11

OC63 (IWFC04) - THE FISC-CERRADO NEAR-REAL TIME WEB-SYSTEM FOR PREDICTING FIRE SPREAD

Professor Britaldo Soares-filho¹, UBIRAJARA OLIVEIRA¹

¹Universidade Federal De Minas Gerais, Belo Horizonte, Brazil

OC64 (IWFC164) - FIRE ANALYSIS CELL - PORTUGUESE METHODOLOGY FOR OPERATIONAL DECISION SUPPORT IN WILDFIRES MANAGEMENT

Fábio Silva¹

¹ANEPC-FEPC, Portugal

OC65 (IWFC306) - WILDLAND FIRE DECISION FACTORS CONSIDERED BY USFS AGENCY ADMINISTRATORS AFTER THE 2009 POLICY UPDATE.

Stephen Fillmore¹

¹US Forest Service, San Diego, United States, ²University of Idaho, Moscow, ID, United States

OC66 (IWFC189) - ENABLING INTEGRATED WILDFIRE RESPONSE OPERATIONS WITH CREWED AND UNCREWED AIR ASSETS: FLIGHT TEST EXPLORATION

Adriana Andreeva-Mori¹, Kohji Ohga¹, Keiji Kobayashi¹, Jeffrey Homola², Marcus Johnson², Parimal Kopardekar²

¹Japan Aerospace Exploration Agency, Mitaka, Japan, ²NASA Ames Research Center, Moffett Field, United States of America

OC67 (IWFC524) - AERIAL FIREFIGHTING WITH DRONE SWARM TECHNOLOGY - FUTURE IS HERE

Agoston Restas¹

¹University of Public Service, Institute of Disaster Management.

OC68 (IWFC468) - A CELLULAR AUTOMATA MODEL FOR WIND-DRIVEN FIRES

Mariana Oliveira¹, Bárbara Mota², Joana G. Freire¹, Sílvia A. Nunes¹, Carlos C. DaCamara¹

¹IDL, Faculdade de Ciências, Portugal, ²Department of Computational Biology, Faculty of Biology and Medicine, University of Lausanne, Switzerland

4:00 PM - 4:30 PM | **Coffee Break**

Exhibition Area | Ground Floor

4:30 PM - 6:00 PM | **Adaptive Management**

Arquivo Room | Thematic Session



The session will discuss: Methods for continuous monitoring and assessment, aiding decision making. Objectives, goals and key performance indicators, making management a continuous cycle of improvement.

Chair: **Margarida Tomé** | Professor, ISA

Keynote Speakers: **Jesus San Miguel** | European Commission - Joint Research Centre

Toddi Steelman | Stanback Dean, Nicholas School of the Environment, Duke University, USA

Panelist: **Tim Mitchell** | National Wildfire Specialist at Fire and Emergency NZ

4:30 PM - 6:00 PM | **Volunteering in Integrated Fire Management**

Infante Room | Workshop



The session will discuss: A roundtable session with representatives of several countries that use volunteer forces for prevention and suppression efforts, aiming to share the current situation, experiences and lessons learnt, as well as systematise recommendations related to the participation of volunteers in the Integrated Fire Management (IFM) in protected areas.

Chair: **Angela Pellin** | Organizer and Facilitator, IPÊ

Speaker: **João Paulo Morita** | Representative in the Brazilian strategy, ICMBio

Luciana de Oliveira Rosa Machado | MMA representative in the Brazilian strategy

André Luis Lima | GIZ representative in the Brazilian strategy

José Beleza | Presentation of the case of Portugal, LBP

Claire Lötter | Presentation of the case of South Africa, Volunteer Wildfire Services

4:30 PM - 6:00 PM | **Forest and Peatland Fire Management - best practices and challenges in ASEAN, examples from Indonesia and Malaysia**

D. Maria Room | Workshop

In Southeast Asia, forest and peatland fires have caused havoc in the past. Peatland fires in particular have been the main culprits of haze pollution events in the region. With peatland covering 23 Mha, representing approximately 40% of the world's known tropical peatlands and roughly 6% of the entire global peatland resource, peatland ecosystems have been at the centre of ASEAN policies as well as at national level in Indonesia and Malaysia which hold the greatest peatland area in the region. It is estimated that ASEAN peatlands store 14% of carbon stored in global peatlands. In this workshop the ASEAN region will be presented and you will be introduced to the challenges the region deals with related to peatland fire. Best practices on fire management will be presented by Indonesia and Malaysia as examples from the region. Future collaboration and partnerships that can support the region transform the challenges into opportunities will be welcome.

Chair: **Bárbara Gonçalves** | Sustainable Use of Peatlands and Haze Mitigation Program, GIZ
 Speakers: **Israr Albar** | Ministry Of Environment and Forestry
Dato' Nor Hisham Bin Mohammad | Fire And Rescue Department Of Malaysia

4:30 PM - 6:00 PM | **Post Fire Intervention**

Miragaia Room | E-Poster Presentations

Chair: **Tamires Yule** | Researcher, Federal University of Mato Grosso do Sul

PP112 (IWFC221) - LAND MANAGEMENT OPTIONS IN RECENTLY BURNED AREAS: A MODELLING APPROACH TO EVALUATE THE IMPACTS OF POST-FIRE INTERVENTIONS

Marta Basso¹, Assistant Researcher Dalila Serpa¹, Researcher Martinho Martins¹, Doctor Jacob Keizer¹, Researcher Diana Vieira²

¹Centre for Environmental and Marine Studies (CESAM), Department of Environment and Planning, University of Aveiro, Aveiro, Portugal, ²European Commission, Joint Research Centre (JRC), Ispra, Italy

PP113 (IWFC297) - A SIMPLE TOOL TO MAP EROSION HOTSPOTS AFTER WILDFIRES

Joana Parente¹, João Pedro Nunes^{1,2}, Jantiene Baartman²

¹cE3c - Center for Ecology, Evolution and Environmental Changes & CHANGE - Global Change and Sustainability Institute, Sciences Faculty, University of Lisbon, Portugal, ²Soil Physics and Land Management group, Wageningen University & Research, Netherlands

PP114 (IWFC7) - EXPERIMENTAL POST-FIRE RESTORATION OF NOTHOFAGUS PUMILIO AND N. ANTARCTICA FORESTS IN TIERRA DEL FUEGO, ARGENTINA

Matthew Ruggirello¹, Rosina Soler¹, Gimena Bustamante¹, **Peter Fule**²

¹Centro Austral De Investigaciones Científicas (cadic-conicet), Ushuaia, Argentina, ²Northern Arizona University, Flagstaff, United States of America

PP115 (IWFC263) - COMBATING FOREST FIRES IN THE PANTANAL THROUGH FIRE PREVENTION AND RESTORATION

Liz Belém¹, student Paula Martins², Judit Szabo³, Renata Libonati¹, Professor Letícia Garcia²

¹Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil, ²Universidade Federal de Mato Grosso do Sul, Campo Grande, Brazil, ³Universidade Federal da Bahia, Salvador, Brazil

PP116 (IWFC414) - ASSESSING POST-FIRE SOIL EROSION AND ASH TRANSPORT RISK WITH WEPPCLOUD-WATAR-EU AFTER THE EXTREME 2022 FOREST FIRE IN CENTRAL EUROPE

Jonay Neris^{1,2}, Carmen Sanchez-Garcia¹, Stefan Doerr¹, Cristina Santin¹, Emilia Urbanek¹, Professor Matthias Forkel³, Anette Eltner³, Robert Krüger³, Kristina Beetz³, Christopher Marrs³, Pete R. Robichaud⁴, Mariana Dobre⁵, Roger Lew⁵, Anurag Srivastava⁵

¹Swansea University, Swansea, United Kingdom, ²Universidad de La Laguna, La Laguna, Spain, ³Technische Universität Dresden, Dresden, Germany, ⁴USDA Forest Service, Rocky Mountain Research Station, Moscow, United States, ⁵University of Idaho, Moscow, United States

PP117 (IWFC470) - DO PRESCRIBED FIRES AFFECT THE DIVERSITY OF NONVOLANT SMALL VERTEBRATES IN OPEN SAVANNAS OF SOUTHEASTERN BRAZIL?

Marcio Martins¹, Luciana Furtado, Ana Paula Carmignotto, Giovana Felício, João Paulo Vieira Alencar, Juan Díaz-Ricaurte, Filipe Serrano

¹Universidade De São Paulo, São Paulo, Brazil

PP118 (IWFC40) - WILDFIRE IMPACTS ON ECOSYSTEM SERVICES IN PORTUGAL: A TRIANGULATION OF RESEARCH FINDINGS, GOVERNMENTAL REPORTS, AND SPECIALISTS' PERCEPTIONS

Renata Martins Pacheco¹

¹Ceabn/isa

PP119 (IWFC394) - USING REMOTE SENSING TO ASSESS FIRE IMPACTS ON TROPICAL DRY FORESTS IN MADAGASCAR

Gaston Hedwigino Tahintsoa^{1,2}, Dimby Raheerijatovoarison¹, Haritiana Zacaharie

Rakotoarivino¹, Rajira Nambinintsoa Ratsimandresy¹, Harifidy Rakoto Ratsimba^{1,2}

¹Land, Landscape and Development Research Lab (LLandDev), Ecole Supérieure des Sciences Agronomiques, Département des Eaux et Forêts (ESSA-Forêts), Madagascar, ²Regional Eastern Africa Fire Management Resource Center (REAFMRC), Madagascar

PP120 (IWFC56) - USE OF REMOTE SENSING TO EVALUATE EFFECTS OF POSTFIRE EMERGENCY STABILIZATION ON OAK FORESTS RECOVERY

Luis Filipe Lopes¹, Filipe S. Dias^{2,3,5}, Paulo Fernandes⁴, Vanda Acácio¹

¹Centre for Applied Ecology "Baeta Neves" (CEABN-InBIO), School of Agriculture, University of Lisbon, Lisboa, Portugal, ²CIBIO/InBio, Centro de Investigação em Biodiversidade e Recursos Genéticos, Laboratório Associado, Instituto Superior de Agronomia, Universidade de Lisboa, Lisboa, Portugal, ³CIBIO/InBio, Centro de Investigação em Biodiversidade e Recursos Genéticos, Laboratório Associado, Universidade do Porto, Vairão, Portugal, ⁴Centro de Investigação e de Tecnologias Agroambientais e Biológicas, Universidade de Trás-os Montes e Alto Douro, Vila Real, Portugal, ⁵BIOPOLIS Program in Genomics, Biodiversity and Land Planning, CIBIO, Portugal

PP121 (IWFC475) - ROOT AND STEM BARK FEATURES OF BANARA ARGUTA BRIQ. (SALICACEAE) FROM BURNED AND UNBURNED AREAS IN THE PANTANAL, BRAZIL

Claudio Ribeiro Barros Júnior¹, **Tamires Yule**¹, Geraldo Alves Damasceno Junior¹, Rosani do Carmo de Oliveira Arruda¹, Edna Scremin-Dias¹

¹Universidade Federal De Mato Grosso Do Sul, Campo Grande, Brazil

PP123 (IWFC163) - POST-FIRE NATURAL REGENERATION IN ATLANTIC FOREST IN SOUTHEASTERN BRAZIL

Patrícia Dias¹, Guilherme Mores², Sustanis Kunz¹

¹Universidade Federal Do Espírito Santo, Jerônimo Monteiro, Brazil, ²Universidade Estadual Paulista, Botucatu, Brazil

PP124 (IWFC51) - LOCAL ASSESSMENT OF TECHNICAL FORESTRY AWARENESS ON SOIL EROSION AFTER WILDFIRE - THE CASE STUDY OF CENTRAL PORTUGAL REGION**Ana Rita Lopes¹**¹University Of Aveiro, Aveiro, Portugal**PP125 (IWFC507) - DIRECT MORTALITY OF SMALL VERTEBRATES CAUSED BY PRESCRIBED FIRES IN GRASSLANDS OF CENTRAL BRAZIL****Bruna Gomes¹**, Marcio Martins¹¹University of São Paulo, Brazil**PP126 (IWFC6) - DETERMINING BURN SEVERITY AND ITS IMPACT ON POST-FIRE REGENERATION IN THE NOTHOFAGUS FORESTS OF TIERRA DEL FUEGO, ARGENTINA**Matthew Ruggirello¹, Rosina Soler¹, Gimena Bustamante¹, **Peter Fule²**¹Centro Austral De Investigaciones Científicas (cadic-conicet), ²Northern Arizona University, Flagstaff, United States**PP127 (IWFC237) - COMBINED RESTORATION STRATEGIES CAN ESTABLISH FIRE-RESILIENT AND FUNCTIONAL LANDSCAPES****Aymen Moghli¹**, Andrea Duane¹, M.Jaime Baeza^{2,3}, Mr Santiago Soliveres^{2,3}, Victor,M. Santana^{2,4}¹Forest Science And Technology Centre Of Catalonia, Solsona, Spain, ²University of Alicante, San vicente de raspeig, Spain, ³Research Institutes Multidisciplinary Institute for Environmental Studies, San vicente del raspeig, Spain, ⁴Mediterranean Center for Environmental Studies, Paterna, Spain4:30 PM - 6:00 PM | **Suppression and Relief****S. João Room** | E-Poster PresentationsChair: **Ángela Iglesias Rodrigo** | Spanish Ministry for the Ecological Transition and Demographic Challenge**PP128 (IWFC342) - CHEMICALLY SPEAKING: WHY USFS, FIRE MANAGEMENT AGENCIES RELY ON PHOSPHATE-BASED FIRE RETARDANTS****Jean Luc Kassabian¹**, Edward Goldberg¹Perimeter Solutions, Clayton, United States**PP129 (IWFC131) - STORMS AND EXTREME BEHAVIOR IN WILDFIRES. RECENT CASES IN THE VALENCIAN COMMUNITY, SPAIN****Agustín Cervera Montero¹**, Jose Luís Soriano Sancho¹, Miguel Angel Botella Martínez¹, SDanielOrozco Bagou¹, Ricardo García Post¹Generalitat Valenciana. Vaersa, Spain**PP130 (IWFC206) - SIXTHSENSE: SMART INTEGRATED EXTREME ENVIRONMENT HEALTH MONITOR WITH SENSORY FEEDBACK FOR ENHANCED SITUATION AWARENESS****Belén Carballo-Leyenda¹**, Jose A. Rodríguez-Marroyo¹, Goran Bijelic², Nerea Briz-Iceta², Miloš Kostić³, Matija Strbac³, Lucas Paletta⁷, Philip Eschenbacher⁵, Rita Paradiso⁴, Giovanni Magenes⁸, Čedomir Stefanović⁶, Andreas Morschhauser⁹, Pablo Fanjul¹⁰¹VALFIS Research Group, Dept. of Physical Education and SportsUniversity Of León, León, Spain, ²TECNALIA R&I, Parque Científico y Tecnológico de Gipuzkoa, San Sebastián, Spain,³Tecnalia Serbia, Beograd, Serbia, ⁴Smartex srl, Polo Tecnologico Navacchio, Pisa, Italy,⁵Senetics Healthcare Group GmbH & Co. KG, Ansbach, Germany, ⁶Department of ElectronicSystems, Aalborg Universitet, Aalborg, Denmark, ⁷Joanneum Research ForschungsgesellschaftmbH, Graz, Austria, ⁸Electrical, Computer and Biomedical Engineering Department, Universityof Pavia, Pavia, Italy, ⁹Technische Universität Chemnitz, Chemnitz, Germany, ¹⁰Metrohm

DropSens, S.L., Oviedo, Spain

PP131 (IWFC446) - MODELLING THE COMBAT OF WILDFIRES WITH THE SOFTWARE FLAMMAPAna Matias², Luis Pita, **Antonio Correia¹**¹SUScita, ISEC-IPC, Coimbra, Portugal, ²Civil Protection, Municipality of Coimbra, Coimbra,Portugal, ³Forest and Nature Conservation Institute, Coimbra, Portugal**PP132 (IWFC115) - JUST IN TIME - PROPOSAL FOR LOGISTICS OF QUICK ALLOCATION OF BRIGADISTS FOR FLOREST FIRE FIGHTING****Kleber Silveira De Castro**¹Instituto Superior de Ciências da Informação e da Administração (ISCIA), Aveiro, Portugal**PP133 (IWFC338) - EXTERNAL SUPPORTING BRIGADES IN FIRE SUPPRESSION IN EXTREME AND SIMULTANEOUS WILDLAND FIRES EPISODES****Ángela Iglesias Rodrigo¹**¹Ministry Ecological Transition And Rural Development (miteco, Spain), Madrid, Spain**PP134 (IWFC241) - A NEW MODEL TO PREDICT WILDLAND FIREFIGHTERS' THERMOPHYSIOLOGICAL STRAIN: THE APPROACH OF THE SIXTHSENSE PROJECT****Belén Carballo-Leyenda¹**, Jose A. Rodríguez-Marroyo¹, Pilar S Collado², David Suárez-Iglesias¹,José Gerardo Villa-Vicente¹¹University Of León, León, Spain, ²University Of León, León, Spain**PP135 (IWFC114) - A MATHEMATICAL TOOL FOR DECISION MAKING IN WILDFIRE SUPPRESSION****Bibiana Granda¹**, Begoña Vitoriano¹¹Interdisciplinary Mathematics Institute, HUMLOG Research Group, Universidad Complutense De Madrid, Madrid, Spain4:30 PM - 6:00 PM | **Risk Handling****Arrábida Room** | Oral CommunicationsChair: **Alan Ager** | FS Research Forester (Retired), USA

OC69 (IWFC205) - THE MODIS FIRE SATELLITE PRODUCTS: A MULTIDECADAL BASELINE FOR GLOBAL FIRE ACTIVITY AND FIRE REGIMES**Luigi Boschetti**¹, David Roy, Louis Giglio¹University of Idaho, Moscow, United States**OC70 (IWFC274) - INTEGRATION OF RESIDENTIAL STRUCTURES LOSS FUNCTIONS INTO WILDFIRE RISK ASSESSMENT****Jonathan Boucher**¹, Ahmad Abo El Ezz², Vittorio Nicoletta¹, Anne Cotton-Gagnon¹, Raphaël Chavardes¹¹Canadian Forest Service, Natural Resources Canada, Quebec, Canada, ²École de Technologie Supérieure, Université du Québec, Montréal, QC, Canada, Montreal, Canada**OC71 (IWFC168) - INCLUSIVE COMMUNITY ENGAGEMENT IN DISASTER PREPAREDNESS AND RESPONSE FOCUSING ON WILDFIRES AND THE GENERATED SMOKE: BEST PRACTICES AND LESSONS LEARNED****Sofia Karma**¹, Milt Statheropoulos¹¹National Technical University of Athens, Athens, Greece**OC72 (IWFC278) - THE EVOLUTION OF THE ACCIDENT REVIEW PROCESS WITHIN THE USDA FOREST SERVICE****Joe Harris**¹, Ben Iverson¹¹USDA Forest Service, St. George, United States, ²California Institute of Integral Studies, San Francisco, United States**OC73 (IWFC106) - TERRITORIAL VULNERABILITY. ASSESSMENT USING AN EXPERT OPINION BASED MULTICRITERIA MODEL.****Eric Maillé**¹¹Inrae-recover, Aix-en-Provence, France**OC74 (IWFC500) - DEFORESTATION AND AGRICULTURE DRIVE AMAZON FIRE ACTIVITY, WHILE DROUGHTS RIDE IN THE SHOTGUN SEAT.****Renata Libonati**^{1,2,3}, José Miguel Cardoso Pereira², Carlos C. DaCamara³, Leonardo Peres^{1,4}, Prof. Ricardo M. Trigo^{1,3}, Duarte Oom², J. A. Rodrigues¹, F. L. M Santos¹, Celia M. Gouveia^{3,4}, A. Enrich Prast^{1,5}, F. Machado Silva^{1,6}, J. M. N Silva²¹Ufrj, Brazil, ²Centro de Estudos Florestais, Instituto Superior de Agronomia, Universidade de Lisboa, Lisboa, Portugal, ³Instituto Dom Luiz, Universidade de Lisboa, Lisboa, Portugal, ⁴Instituto Português do Mar e da Atmosfera, Lisboa, Portugal, ⁵Department of Thematic Studies-Environmental Change, Linköping University, Linköping, Sweden, ⁶Programa de Geociências (Geoquímica Ambiental), Instituto de Química, Universidade Federal Fluminense, Niterói, Brazil**OC75 (IWFC0) - HOW ARE RESIDENTS' EVACUATION DECISION-MAKING PROCESSES AFFECTED BY CHANGING WILDFIRE BEHAVIOR? INVESTIGATING THE 2020 EAST TROUBLESOME FIRE IN COLORADO, USA****Catrin Edgeley**¹, William Cannon¹, Scott Pearse², Branko Kosovic², Gabriele Pfister², Rajesh Kumar²¹Northern Arizona University, Flagstaff, United States, ²National Center for Atmospheric Research, Boulder, United States6:00 PM | **Conversations around Fire with Stephen Pyne, Viriato Soromenho Marques e Carlos Vaz Marques Conference Dinner****D. Maria Room** | Cultural Session8:00 PM - 11:00 PM | **Conference Dinner**
Palácio da Bolsa**FRIDAY, MAY 19**9:30 AM - 11:00 AM | **Landscape Fire Governance - Framework****Arquivo Room** | Plenary Session

The session will discuss: How a set of guiding principles can help achieve improved strategies, policies, and adapt landscape fire management to global change and increasing challenges

How a renewed governance model, closing gaps of knowledge and intervention, can work favour of communities, lowering impacts and creating a more resilient territory.

11:00 AM - 11:30 AM | **Coffee Break****Exhibition Area** | Ground Floor11:30 AM - 1:00 PM | **Closing Ceremony****Arquivo Room** | Plenary Session

Wrapping up the conference and laying ground for the years ahead. The next steps towards integrated fire management.

During the 8th IWFC, all E-Posters selected by the jury will be on display.

E-Poster presentation sessions will take place in the S. João and Miragaia rooms, according to each theme. The remaining selected E-Posters will be available for consultation throughout the conference and can be viewed on LCD screens also located in the S. João and Miragaia rooms.

All selected E-Posters will also be available on the conference mobile application.

STAKEHOLDER ENGAGEMENT

PO01 (IWFC429) - USING STAKEHOLDER-DERIVED FOREST MANAGEMENT PREFERENCE MAPS TO MODEL THE EFFECT OF FOREST MANAGEMENT STRATEGIES ON MITIGATING FOREST FIRE.

Bushra Sanira Asif^{1,2}, Umberto Pernice², Dr Paolo Fiorucci², Mr Nicolò Perello^{1,2}

¹University of Genoa, Genoa, Italy, ²CIMA Research Foundation, Savona, Italy

PO02 (IWFC251) - STAKEHOLDER AND SOCIAL NETWORK ANALYSIS FOR UNDERSTANDING FOREST (FIRES) MANAGEMENT - A CONTRIBUTION BASED ON A SYSTEMATIC LITERATURE REVIEW

Cláudia Fernandes¹, Dr. Sandra Valente, Elisabete Figueiredo

¹University Of Aveiro, AVEIRO, Portugal

PO03 (IWFC412) - INDIGENOUS IDENTITY AND FOREST FIRE FIGHTERS IN THE MONARCH BUTTERFLY REGION, MEXICO

Erika Garduño-Mendoza¹, Diego Rafael Perez Salicrup

¹IIES-UNAM, Morelia, Mexico

PO04 (IWFC242) - ENGAGING COMMUNITIES THROUGH ARTS: COMMUNAL THEATRE AS A PARTICIPATORY TOOL TO IMPROVE WILDFIRE RISK REDUCTION AND READINESS.

Msc António Patrão¹, Msc Frederic da Cruz Pires², Ph. D. Eduardo Marques³, Ph. D. Mieko Yoshihama⁴

¹Technical Specialist, Spacial Informatics Group, San Francisco, USA, ²School of Education and Social Sciences, Politécnico of Leiria, Leiria, Portugal, ³Faculty of Social and Human Sciences, University of Azores, Ponta Delgada, Portugal, ⁴School of Social Work, University of Michigan, Detroit, USA

PO05 (IWFC65) - FIRE RISK ANALYSIS IN PORTUGUESE COMMUNITY FORESTS AND THE SEARCH FOR EFFECTIVE SOLUTIONS FOR ITS REDUCTION

PhD Iryna Skulska Kolos¹, Professor Cristina Montiel², Mr Francisco Castro Rego¹, Professor Maria do Loreto Monteiro¹, PhD Renata Pacheco¹, PhD Inês Duarte¹, Phd Catarina Sequeira¹, Vanda Acácio¹, Miss Conceição Colaço¹

¹Centre for Applied Ecology "Prof. Baeta Neves" (CEABN-InBIO), School of Agriculture, University of Lisbon, Lisbon, Portugal, ²Complutense University of Madrid, Department of Geography. Profesor Aranguren, Madrid, Spain

PO06 (IWFC178) - TRADITIONAL BURNING FROM EXPERTS AND RURAL COMMUNITIES' PERSPECTIVE: EXPLORING BOTH MENTAL MODELS TO FOSTER AN EFFECTIVE RISK

COMMUNICATION

Mrs. Mayara Souza^{1,2}, Dr. Abílio Pereira Pacheco^{3,1,2}, Dr. Jorge Grenha Teixeira^{1,2}

¹Faculty of Engineering of the University of Porto, Porto, Portugal, ²INESC TEC, Porto, Portugal,

³ForestWISE, Collaborative Laboratory for Integrated Forest & Fire, Vila Real, Portugal

PO07 (IWFC184) - TRIBAL CONSULTING BEFORE AND DURING AN INCIDENT: CHANGE WITHIN THE US GOVERNMENT IS HAPPENING BUT MORE NEEDS TO BE DONE.

Director, Office of Emergency Management Jason Steinmetz¹

¹Bureau Of Indian Affairs, Washington, United States

PO08 (IWFC343) - STAKEHOLDER ENGAGEMENT IN THE DEFINITION OF RESILIENT STRATEGIES TO DEAL WITH CLIMATE CHANGE: FORES PROJECT APPROACH

Dr. Sandra Valente¹, Dr. Paula Maia², Mrs. Virginia Rocha¹, Mr. David Carvalho²

¹ForestWISE, Vila Real, Portugal, ²Universidade de Aveiro, Aveiro, Portugal

PO09 (IWFC172) - EFFORTS TO REORGANIZE LANDSCAPE FIRE MANAGEMENT IN GREECE FOLLOWING RECENT MAJOR DISASTERS

Dr Gavriil Xanthopoulos¹, Prof. Dr. Johann Georg Goldammer², Professor Georgios Mallinis³, Dr Ioannis Mitsopoulos⁴, Mr George Eftychidis⁵

¹Hellenic Agricultural Organization "Dimitra", Institute Of Mediterranean Forest Ecosystems, Athens, Greece, ²The Global Fire Monitoring Center (GFMC), Fire Ecology Research Group, c/o Freiburg University, Freiburg, Germany, ³Aristotle University of Thessaloniki, School of Rural and Surveying Engineering, Thessaloniki, Greece, ⁴Natural Environment and Climate Change Agency (NECCA), Athens, Greece, ⁵Satways Ltd, Athens, Greece

PO161 (IWFC355) TRADE-OFFS IN FOREST MANAGEMENT FOR FIRE PREVENTION

PhD Associate Professor Kevin Cianfaglione¹, Dr. Prof Silvano Landi, Dr. Prof Bartolomeo Schirone, Dr. Prof. Alessandro Bottacci, PhD Associate Professor Kevin Cianfaglione, Dr. Prof Camilla Wellstein, Dr. Tessa Oliver, Dr. Prof Giovanni Damiani

¹Université Catholique De Lille, Francia

TECHNICAL INNOVATION

PO10 (IWFC138) - PYO3F: A PYTHON FRAMEWORK FOR FIRE-RELATED OPTIMIZATION

Dr. Filipe Alvelos¹, David Neto¹

¹ALGORITMI Research Centre / LASI, University of Minho, Braga, Portugal

PO11 (IWFC119) - NOVEL REMOTELY PILOTED AERIAL SYSTEM BASED HYPERSPECTRAL IMAGING FOR WILDFIRES CHARACTERIZATION

Dr. Juan Pablo Arroyo-Mora¹, Dr. Margaret Kalacska², Dr. João Caetano³, Gonçalo Cruz³, Luis Felix³,

Dr. George Leblanc¹, Mr. Oliver Lucanus², Gabriela Ifimov¹

¹NRC, Ottawa, Canada, ²Applied Remote Sensing Laboratory - McGill University, Montreal, Canada,

³Portugal Airforce Research Center, Pêro Pinheiro, Portugal

PO12 (IWFC393) - ANALYSING DIFFERENCES IN FORESTED AREA AROUND VILLAGES OBTAINED WITH TWO NATIONAL CARTOGRAPHIC SOURCES

Bruno Barbosa¹, Ana Gonçalves¹, Sandra Oliveira^{1,2}, Jorge Rocha^{1,2}

¹Centre of Geographical Studies, Institute of Geography and Spatial Planning, University of Lisbon, Lisbon, Portugal, ²Associate Laboratory Terra, Lisbon, Portugal

PO13 (IWFC391) - SAFEFOREST: A SEMI-AUTONOMOUS ROBOTIC SYSTEM FOR FOREST CLEANING AND FIRE PREVENTION

Dr. Micael Couceiro¹, Dr. Paulo Peixoto², Dr. Carlos Viegas³, Dr. George Kantor⁴

¹Ingeniarius, Ltd., Alfena, Portugal, ²Institute of Systems and Robotics, Coimbra, Portugal, ³Association for the Development of Industrial Aerodynamics, Coimbra, Portugal, ⁴Carnegie Mellon University, Pittsburgh, USA

PO14 (IWFC180) - DEFINITION OF A HOLISTIC REGULATORY FRAMEWORK FOR ENHANCING SAFETY AND RESILIENCE OF THE BUILT ENVIRONMENT IN THE WILDLAND-URBAN INTERFACE

Phd Hélder D. Craveiro¹, Luana Tesch¹, Aldina Santiago¹, PhD Luís Laim¹

¹University of Coimbra, Department of Civil Engineering of the Faculty of Sciences and Technology - ISISE - Institute for Sustainability and Innovation in Structural Engineering, Coimbra, Portugal

PO15 (IWFC260) - NEW IMPROVEMENTS ON THE BRAMS WILDFIRE-ATMOSPHERE MODELLING SYSTEM

PhD Researcher level 1 Isilda Cunha Menezes¹, Luiz Rodrigues², Saulo Freitas², Mateus Ferreira e Freitas³, Rodrigo Braz², Valter Ferreira de Oliveira⁴, Pedro Almeida¹, Karla Longo², Dr Diogo Lopes¹, Joana Ferreira¹, Myriam Lopes¹, Ana Isabel Miranda¹

¹CESAM - University Of Aveiro, Aveiro, Portugal, ²CPTEC - National Institute for Space Research, Brazil,

³LaMCAD - Federal University of Goiás, Brazil, ⁴Finatec, Brazil

PO16 (IWFC55) - FIRE SEVERITY INDICATOR FOR FIREFIGHTING DISPATCH: BEHAVIOR ANALYSIS OF DIFFERENT TYPES OF FIRE EVENTS IN THE BRAZILIAN AMAZON

Dr Daniela de Faria¹, Henrique Bernini¹

¹Operations and Management Center of the Amazon Protection System (Censipam), Porto Velho, Brazil

PO17 (IWFC97) - FIRE EDUCATION PLATFORM: A COLLABORATIVE KNOWLEDGE TRANSFER TOOL ON WILDFIRES, DEVELOPED UNDER THE FIRE-RES PROJECT

Fabício Fava¹, PhD Iryna Skulska Kolos², Phd Catarina Sequeira², Renata Martins Pacheco², Miss Conceição Colaço²

¹i2ADS/FBAUP, , Portugal, ²CEABN/InBIO, Portugal

PO18 (IWFC415) - A SYSTEM TO AUTOMATICALLY ASSIST IN THE GEOLOCATION OF FOREST FIRES WITH CROWDSOURCED DATA

Dr. Cidália C. Fonte^{1,2}, Dr. Alberto Cardoso³, Dr Jacinto Estima³, Eng Ismael Jesus³, MSc Joaquim Patriarca^{2,3}

¹University of Coimbra, Department of Mathematics, Coimbra, Portugal, ²Institute For Systems Engineering and Computers at Coimbra (INESC Coimbra), Coimbra, Portugal, ³University of Coimbra, Department of Informatics Engineering, Center for Informatics and Systems of the University of Coimbra (CISUC), Coimbra, Portugal

PO19 (IWFC372) - SLING DRAGON:- “THE MOST SAFE AND EFFECTIVE TOOL FOR

AERIAL CONTROLLED BURNING”

Director Firefighting Division Sergio Fukamati¹

¹Sei Industries Ltd, 7400 Wilson Avenue, Delta, V7G 1H3, Canada

PO20 (IWFC402) - DRONE REMOTE SENSING FOR REAL-TIME SITUATIONAL AWARENESS AND DECISION SUPPORT IN WILDFIRE MANAGEMENT

Prof Eija Honkavaara¹, Dr. Raquel Alves de Oliveira¹, Teemu Hakala¹, Niko Koivumäki¹, Dr Lauri Markelin¹, Dr Roope Näsi¹, Dr Juha Suomalainen¹

¹Finnish Geospatial Research Institute, Espoo, Finland

PO21 (IWFC418) - INNOVATION ON SOFTWARE APPLICATIONS AND TECHNOLOGICAL EQUIPMENTS AND SOLUTIONS, AND OPERATIONAL COMMUNICATIONS SYSTEMS.ON WILDFIRE MONITORING IN TANZANIA

Ms Kekilia Kabalimu¹

¹MINISTRY OF NATURAL RESOURCES AND TOURISM, TANZANIA FOREST SERVICES, DAR ES SALAAM, Tanzania

PO22 (IWFC318) - ALARMES: NEAR REAL-TIME BURNED AREA INFORMATION SYSTEM TO SUPPORT FIRE SUPPRESSION AND MANAGEMENT ACTIVITIES IN BRAZIL

Prof Renata Libonati¹, PhD Miguel Pinto, Msc Julia Rodrigues, Msc Caio Sena, Msc Filippe Lemos Maia Santos, Dr Leonardo Peres, Liz Belém, PhD Allan Pereira, Professor Carlos C. DaCamara

¹Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil

PO23 (IWFC113) - ANALYSIS OF WILDFIRE MODEL FOR SYSTEM OF SYSTEMS RESEARCH

Mr Jorge Lovaco¹

¹Linköpings Universitet, Linköping, Sweden

PO24 (IWFC520) - BURNED AREA VALIDATION EXPERIMENT FROM REMOTE SENSING MONITORING PRODUCTS

Msc Alice Macedo¹, PhD Marcos Adami¹, Dr. Fabiano Morelli¹, PhD Thales Körting¹

¹National Institute for Space Research, São José dos Campos, Brazil

PO25 (IWFC219) - INSTALLATION OF AUTONOMOUS FIRE MONITORING SYSTEMS ON POWER TRANSMISSION OVERHEAD LINES

Dr João Matos¹, Eng Jose Moreira², Eng. Jorge Martins², Phd Pedro Vieira^{1,3}, Msc Rui Almeida¹

¹Bee2firedetection SA, Abrantes, Portugal, ²REN - Rede Eléctrica Nacional, S.A., Lisboa, Portugal,

³NOVA School of Science and Technology, Caparica, Portugal

PO26 (IWFC266) - THE “SENSOR MAN” IN FOREST FIREFIGHTING OPERATIONS.

Mr. Luiz Motta¹, Mr. Lawrence Oliveira¹, Ms. Talita Freitas¹

¹Ibama, Brasília, Brazil

PO27 (IWFC215) - USE OF HIGH-ALTITUDE BALLOONS FOR WILDFIRE MANAGEMENT - A DEDICATED “SATELLITE” FOR EACH MAJOR FIRE EVENT

Professor Alexandra Moutinho¹, Maria João Sousa¹, Miguel Almeida², Diogo Henriques¹, Miguel

Bergano³

¹IDMEC, Instituto Superior Técnico, Universidade de Lisboa, Lisboa, Portugal, ²ADAI, Universidade de Coimbra, Coimbra, Portugal, ³Instituto de Telecomunicações, Aveiro, Portugal

PO28 (IWFC89) - A NEW ATLAS OF MONTHLY BURNED AREA MAPPING FOR PORTUGAL (1984-2021)

Dr. Alana K. Neves¹, Dr. Manuel L Campagnolo¹, Dr. João M N Silva¹, Dr. José M. C. Pereira¹
¹Forest Research Centre, School Of Agriculture, University Of Lisbon, Lisbon, Portugal

PO29 (IWFC349) - WILDFIRE DETECTION AND MONITORING **Niko Peha¹**

¹Overwatch Imaging Inc, Hood River, United States

PO30 (IWFC11) - DEFORESTATION AND FIRES IN THE BRAZILIAN AMAZON

Dr. Ubirajara Oliveira¹, **Dr. William Costa**, Dr. Professor Britaldo Soares-son
¹UFMG, Belo Horizonte, Brasil

PO31 (IWFC416) - MULTISOURCE DATA INTEGRATION FOR IMPROVING FIRE BEHAVIOUR ANALYSIS AND IMPACT ON MEDITERRANEAN FORESTS: ALBENGA (LIGURIA, ITALY) CASE STUDY

Mrs Lola Palmieri^{1,2}, Mr Umberto Morra di Cella¹, Dr Paolo Fiorucci¹, Mr Nicolò Perello^{1,2}
¹Cima Research Foundation, Savona, Italy, ²University of Genoa, Genoa, Italy

PO32 (IWFC326) - TERRAIN DIFFICULTY INDEX (TDI): EVALUATING THE OPPORTUNITIES IN THE LANDSCAPE TO SUPPORT INITIAL ATTACK ASSESSMENT.

Dr Raul Quilez¹, Carmen Robles¹, Francisco Díez¹, Dr. Adrian Cardil¹, PhD Joaquín Ramírez¹
¹Tecnosylva, León, Spain

PO33 (IWFC403) - ORORATECH'S WILDFIRE SOLUTION - GLOBAL, FAST, RELIABLE, SATELLITE-BASED WILDFIRE DETECTION

Dmitry Rashkovetsky¹, Max Helleis¹, Julia Gottfriedsen¹, Dr.-Ing. Martin Langer¹
¹OroraTech GmbH, Germany

PO34 (IWFC235) - A STRATEGIC APPROACH TO SOURCING AND USING FIRE INFORMATION IN SAVANNA FIRE MANAGEMENT

Mr Gernot Ruecker¹, Mr. Amara Ouattara², Mr. Pascal Kouame², Dr. Jean-Luc Kouassi³, Mr. Roger Kouadio², Mr Djafarou Tiomoko⁴
¹Zebris Geo-it GmbH, Munich, Germany, ²Office Ivoirien des Parcs et Réserves (OIPR), Abidjan, Côte d'Ivoire, ³Institut National Polytechnique Felix Houphouët-Boigny and AMBERO GmbH, Yamoussoukrou and Abidjan, Côte d'Ivoire, ⁴GIZ Gesellschaft für Internationale Zusammenarbeit GmbH, , Côte d'Ivoire

PO35 (IWFC76) - LAND TENDER: A COLLABORATIVE, CLOUD-BASED DECISION SUPPORT PLATFORM FOR RESOURCE MANAGEMENT AND WILDFIRE MITIGATION

Hugh Safford², Scott Conway¹
¹University Of California Davis, Davis, États-Unis, ²Vibrant Planet, Incline Village, États-Unis

PO36 (IWFC339) - DEVELOPMENT OF AN EMISSION-BASED WILDFIRE EARLY WARNING SYSTEM

Haris Sefo¹

¹Breeze Technologies UG & HafenCity Universität, Hamburg, Germany

PO159 (IWFC245) - DEVELOPMENT OF A HUMAN BEHAVIOUR WILDFIRE IGNITION RISK INDEX

Pedro Almeida¹, **PhD Researcher level 1 Isilda Cunha Menezes¹**, Luiz Rodrigues², Saulo Freitas², Mateus Ferreira e Freitas³, Rodrigo Braz², Valter Ferreira de Oliveira⁴, Karla Longo², Dr Diogo Lopes¹, Joana Ferreira¹, Myriam Lopes¹, Ana Isabel Miranda¹

¹Center for Environmental and Marine Studies (CESAM), Department of Environment and Planning, University of Aveiro, Campus Universitário de Santiago, 3810-193 Aveiro, Portugal, ²Center for Weather Forecasting and Climate Studies (CPTEC), Department of Physics, National Institute for Space Research, Cachoeira Paulista, SP, Brazil, ³Multiuser Laboratory of High Performance Computing (LaMCAD), UFG Innovation Agency Building, Federal University of Goiás (UFG), Samambaia Campus, 74690-631, Goiânia, GO, Brazil, ⁴Finatex, Brasília-DF, Campus Darcy Ribeiro, Brazil

PLANNING

PO38 (IWFC86) - ANALYSIS OF LAND USE AND LAND COVER CHANGES ON THE FIRE EFFECT IN A PROTECTED AREA IN THE BRAZILIAN SEMIARID

Mariana Aragão¹, Fernanda Lucas¹, Leonardo Duarte Biazatti¹, Rita de Cássia Freire Carvalho¹, Antônio Henrique Cordeiro Ramalho², Nilton Cesar Fiedler¹
¹Federal University of Espírito Santo, Jerônimo Monteiro, Brazil, ²Federal University of the South and Southeast of Pará, São Félix do Xingu, Brazil

PO39 (IWFC104) - HOW TO LEARN ABOUT WILDFIRES BY PROMOTING PRACTICAL KNOWLEDGE ABOUT LOCAL ENVIRONMENTAL MANAGEMENT.

Ms Helena Ballart¹, Dr. Núria Prat¹, Jordi Vendrell¹, **Mr Guillem Canaleta¹**, Mr David Martin¹, Mr Guillem Armengol¹, Dr. Míriam Arenas², Miss Conceição Colaço³, Finian Joyce⁴, Israel Rodriguez², Phd Catarina Sequeira³, Iryna Skulska³, Renata Martins Pacheco³, Dr Maria Cifre-Sabater²
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PO40 (IWFC147) - WILDLAND FIRE MANAGEMENT NETWORK FOR BRAZILIAN WETLANDS LEARNINGS FROM SEASON 2022, APPLICATIONS FOR SEASON 2023.

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PO41 (IWFC294) - EVALUATION OF COLORS FOR UNIFORM USED IN FIGHTING FOREST FIRE BASED ON THE PERCEPTION OF MILITARY FIRE FIGHTERS IN PARANÁ

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PO42 (IWFC420) - THE INFLUENCE OF EXTREME FIRE EXPERIENCE ON COMPANIES' PREPAREDNESS IN PORTUGAL**Master Fernando Correia**^{1,2}, Dr Fantina Maria Tedim^{1,2}, PhD André Samora-Arvela^{1,2}, Master Cláudia Magalhães^{1,2}, Dr. Diogo Miguel Pinto^{1,2}¹Centre of Studies in Geography and Spatial Planning, Porto, Portugal, ²Faculty of Arts of University of Porto, Porto, Portugal**PO43 (IWFC304) - LEARNING TO LIVE WITH FIRE - PRIORITIZED WILDFIRE EVACUATION CHECKLIST****Dr. Douglas Cram**¹¹New Mexico State University, Las Cruces, United States**PO44 (IWFC379) - FIRE, FLOOD AND PANTANAL VEGETATION****Dr. Geraldo Alves Damasceno Junior**¹, MsC Alexandre de Matos Martins Pereira^{1,2}, Dr. Jens Oldeland³, Dr. Pia Parolin⁴¹Laboratório de Ecologia Vegetal, Instituto de Biociências, Universidade Federal De Mato Grosso Do Sul, Campo Grande, Brazil, ²Centro Nacional de Prevenção e Combate aos Incêndios Florestais (Prevfogo)/ Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (IBAMA), Campo Grande, Brazil, ³Biodiversity, Evolution, and Ecology of Plants (BEE), Institute of Plant Sciences and Microbiology, University of Hamburg., Hamburg, Germany, ⁴Université Côte d'Azur INRAE, CNRS, ISA, Sophia Antipolis, Nice, France**PO45 (IWFC377) - LONG-TERM ECOLOGICAL RESEARCH ON FIRE IN PANTANAL WETLAND: A SUBSIDY TO INTEGRATED FIRE MANAGEMENT.****Dr. Geraldo Alves Damasceno Junior**¹, Dr. Arnildo Pott¹, Dr. Ieda Maria Bortolotto¹, Dr. Danilo Bandini Ribeiro¹, Doctor Edna Scremin-Dias¹, MsC Alexandre de Matos Martins Pereira^{1,3}, M.Res. Maxwell Oliveira², Dr. Rosa Helena da Silva¹, Doctor Tamires Yule¹, Dr. Francielli Bao¹, Dr. Fábio de Oliveira Roque¹¹Universidade Federal De Mato Grosso Do Sul, Campo Grande, Brazil, ²Universidade Federal de Minas Gerais, Belo Horizonte, Brazil, ³Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (IBAMA), Campo Grande, Brazil**PO46 (IWFC466) - FIRE DYNAMICS IN THE AMAZON-CERRADO TRANSITION ZONE OF MARANHÃO STATE, BRAZIL****Me Ana Larissa De Freitas**¹, Dr Guilherme Mataveli², Me Paulo H. A. Leão¹, Dr Celso H. L. Silva-Junior^{3,4,5}, Dr Tiago Ferraz⁶, Dra Swanni Alvarado⁷, Dra Liana O. 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Müller², Prof Arne Arnberger², Prof Herbert Formayer², Dr David Leidinger², Dr Tobias Schadauer³, Dr Susanne Karel³, Dr Christoph Bauerhansl³¹IIASA, Laxenburg, Austria, ²BOKU, Vienna, Austria, ³BFW, Vienna, Austria**PO51 (IWFC50) - FOREST SOIL MANAGEMENT - A POST-FIRE SOIL EROSION ASSESSMENT BY COMPARISON OF LINEAR REGRESSION AND REVISED-MMF MODEL APPLICATION****Ana Rita Lopes**¹¹University Of Aveiro, Aveiro, Portugal**PO52 (IWFC504) - THE EVOLUTIONARY LEAP OF ENVIRONMENTAL EDUCATION FROM THE ZERO FIRE POLICY TO THE PERSPECTIVE OF INTEGRATED FIRE MANAGEMENT.**Mr. Marcos Guedes¹, **Sr. Ricardo Lopes**¹¹Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis, Brasília, Brazil**PO53 (IWFC356) - INTEGRATING FOREST AND FIRE MANAGEMENT THROUGH A NOVELSIMULATION-BASED OPTIMIZATION APPROACH**Dr. Filipe Alvelos, **Isabel Martins**, Susete Marques**PO54 (IWFC334) - BIOMASS BURNING EMISSIONS DURING THE 2020 PANTANAL BURNING CRISIS: THE NEED FOR A FIRE MANAGEMENT POLICY**Dr Guilherme Mataveli¹, **Me Ana Larissa De Freitas**², Dr. Alber Sanchez¹, Dr. Elisabete Moraes¹, Dr. Luiz Aragão¹¹National Institute for Space Research, , Brazil, ²National Center for Monitoring and Early Warning of Natural Disasters, Brazil**PO55 (IWFC152) - OPTIMISATION METHODS FOR WILDFIRE SUPPRESSION RESPONSE PLANNING****Dr. André Bergsten Mendes**¹, Dr. Filipe Alvelos², Dr. António Vieira³, Dr. António Bento-Gonçalves³, Mrs.

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PO56 (IWFC341) - FIRE MANAGEMENT DECISIONS UNDER CLIMATE CHANGE CONTEXT: RESPONSE OF SUB-ADULT TREES TO FIRE SEASONS IN GUINEAN SAVANNA (WEST AFRICA)

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PO57 (IWFC247) - FIELD OBSERVATION SHEETS TO IDENTIFY RESILIENCE TO FOREST FIRES IN CHILEAN MEDITERRANEAN LANDSCAPES

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PO58 (IWFC439) - CARBON STOCK AND GREENHOUSE GAS EMISSIONS CAUSED BY WILDFIRES IN MONODOMINANT STANDS OF COPERNICIA ALBA IN THE PANTANAL WETLAND.

M.Res. Maxwell Oliveira¹, Dr. Rosa Helena da Silva², Dr. Francielli Bao², MsC Alexandre de Matos Martins Pereira², Ph.D. José Marcato Junior², Dr. Arnildo Pott², Dr. Geraldo Alves Damasceno Junior²

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PO59 (IWFC10) - MONTE CARLO SIMULATIONS FOR ESTIMATING FIRE PROBABILITY

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PO60 (IWFC461) - DO TREE DOMINANCES DEFINE DIFFERENT FUEL BEDS AT THE LOCAL SCALE?

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PO61 (IWFC272) - FIRE-SPOTTING RISK FOR EMERGENCY PLANNING: THE ROLE OF MESO- AND MACRO- SCALE FACTORS

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PO62 (IWFC61) - REMAINS: A NEW FIRE-LANDSCAPE MODELLING PLATFORM TO SIMULATE INTEGRATED FIRE MANAGEMENT SCENARIOS

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PO63 (IWFC358) - EXPERIENCE FROM STRUCTURING A FEDERAL STRATEGY FOR VOLUNTEERING IN INTEGRATED FIRE MANAGEMENT IN BRAZIL

Dra Angela Pellin¹, Sra Mariana Senra De Oliveira², Mr. Mauricio Marcon Rebelo da Silva³, Ms. Luciana de Oliveira Rosa Machado⁵, Ms. Giovana Dominicci Silva¹, Mr. André Luis Lima⁴

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PO64 (IWFC107) - ARTICULATION OF THE BRIDAGES PROGRAM WITH STATE INSTITUTIONS IN THE MANAGEMENT OF INTEGRATED FIRE MANAGEMENT ACTIONS

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PO65 (IWFC363) - FIRE EFFECTS ON THE FLOWERING OF ENDEMIC SPECIES IN THE BRAZILIAN RUPESTRIAN GRASSLANDS

Dr. Gudryan Baronio¹, MSc MariaLuiza Azevedo², Dr. Paulo Sano³, Biologist Roberto Almeida³, Dr. André Rech⁴, **Dr. Vania Pivello¹**

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PO66 (IWFC17) - COMPUTATIONALLY EFFICIENT BURN PROBABILITY APPROXIMATION USING A CONNECTIVITY INDEX

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PO67 (IWFC371) - OBSTACLES AND SOLUTIONS TO INCREASING PRESCRIBED BURNING ON CALIFORNIA'S CENTRAL COAST RANGELANDS

Livestock And Natural Resources Advisor Devii Rao¹, Fire Fuel Mitigation Program and Forest Health Coordinator Jamie Tuitele-Lewis², Program Manager Jared Childress³, Prescribed Burn Organizer Alex Michel³

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PO68 (IWFC160) - EIGHTEEN YEARS OF MIOMBO FIRE-RELATED RESEARCH: LESSONS FOR WOODLANDS CONSERVATION AND RESTORATION

Dr Natasha Ribeiro¹, Dr Romana Rombe Bandeira, Mr Aniceto Chauque, Dr Ivete Maquia, Dr Ana Isabel Ribeiro de Barros

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PO69 (IWFC27) - CLIMATE CHANGE AND WILDFIRES: SEVERITY WAVES INDICATE THE AMAZON RAINFOREST'S POSSIBLE FUTURE

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PO70 (IWFC227) - EVACUATION IN RURAL FIRE SITUATION IN PORTUGAL - CABANÕES CASE STUDY

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PO71 (IWFC277) - SCIENCE SUPPORTING FIRE MANAGEMENT DECISIONS: WHERE TO PLACE TREATMENTS?

Ana C.L. Sá¹, PhD student Bruno Aparicio¹, Prof. José Miguel Cardoso Pereira¹, Fábio Silva², Dr. Akli Benali¹

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PO72 (IWFC411) - THE CHALLENGE OF WILDFIRE MANAGEMENT THROUGH SPATIAL PLANNING: LESSONS ACROSS THE WORLD

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PO73 (IWFC73) - THE FRAGMENTED LEGAL REGIME OF VELDFIRE MANAGEMENT IN SOUTH AFRICA.

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PO74 (IWFC36) - ECUADOR'S AMAZONÍA SIN FUEGO PROGRAMME: A STRATEGY FOR REDUCING FOREST FIRES

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PO75 (IWFC3) - FIRE REGIMES AND RURAL LANDSCAPE DYNAMICS IN CENTRAL MOUNTAIN SYSTEM

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PO76 (IWFC443) - PROJECTING FUTURE WILDFIRE SPREAD POTENTIAL IN BRITISH COLUMBIA, CANADA

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PO77 (IWFC70) - A JOURNEY OF THE BUSHFIRE STRATEGY DEVELOPMENT IN VICTORIA, AUSTRALIA

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PO78 (IWFC315) - GEOLOCATION OF RESERVOIRS/WATERSHEDS FROM SATELLITE

Mr. Luís Sousa¹, Mr. Guilherme Rocha, Mr. Cláudio Sousa

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PO79 (IWFC204) - A QUANTIFICATION OF LAND GOVERNANCE ROLE IN MITIGATING WILDFIRE IMPACTS IN ITALY

Gian Luca Spadoni^{1,2}, Jose V. Moris¹, Dr. Giorgio Vacchiano³, Mario Elia⁴, Matteo Garbarino¹, Emanuele Sibona¹, Antonio Tomao^{5,6}, Anna Barbat⁵, Lorenzo Sallustio⁷, Luca Salvati⁸, Carlotta Ferrara⁸, Saverio Francini^{9,10}, Enrico Bonis¹¹, Ilaria Dalla Vecchia¹¹, Andrea Strollo¹², Marco Di Leginio¹², Michele Munafò¹², Gherardo Chirici^{9,10}, Raoul Romano⁸, Piermaria Corona^{5,13}, Marco Marchetti⁷, Renzo Motta¹, Davide Ascoli¹

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PO80 (IWFC244) - SUPPORTING EFFECTIVE FIRE MANAGEMENT IN UGANDA

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PO81 (IWFC362) - ROLE OF A CIVIL SOCIETY ORGANISATION IN WILDFIRE RISK AWARENESS AND PREPAREDNESS WITHIN FOREIGN COMMUNITIES AND VISITORS

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PO82 (IWFC25) - LINKS BETWEEN WILDLAND FIREFIGHTER PERFORMANCE AND WORKING CONDITIONS

Dr. Robin Verble¹, Rachel Granberg², Mr Seth Pearson², Dr. Matt Thimgan¹

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PO83 (IWFC187) - IMFIRE - AN INTELLIGENT WILDFIRE MANAGEMENT AND DECISION SUPPORT SYSTEM

Dr. Carlos Viegas¹, João Paulo², Jérôme Mendes², Luis Ribeiro¹, António Gameiro Lopes¹, Jaime Silva³, João Mira⁴, Ana Isabel Miranda⁵

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PO160 (IWFC35) - AUTHORIZED CONTROLLED BURNS AS A FIRE MANAGEMENT TOOL IN THE SERRA DA CANASTRA NATIONAL PARK/MINAS GERAIS /BRAZIL

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¹ICMBio, São Roque de Minas, Brasil ork is unendorsed and not financially supported by this organization), United States

PREVENTION & PRE-SUPPRESSION

PO84 (IWFC531) - THE JUDEAN MOUNTAINS FIRE - 2021 (2): NEW INSIGHTS ON FOREST MANAGEMENT AND FIRE PREVENTION

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PO85 (IWFC421) - TWENTY ONE YEARS OF PRESCRIBED FIRE ON THE ISLAND OF “GRAN CANARIA” (CANARY ISLANDS, SPAIN) AND ITS INFLUENCE ON WILDFIRES

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PO86 (IWFC442) - UNGULATES AS ECOSYSTEM SERVICE MEDIATORS IN MEDITERRANEAN ECOSYSTEMS: WILDFIRE PREVENTION AND CARBON STORAGE

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PO87 (IWFC385) - SMALL AND FLEXIBLE BIOREFINERIES AS A SMART TOOL TO PREVENT WILDFIRES

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PO88 (IWFC447) - NUMERICAL MODELLING OF WILDFIRE PROPAGATION IN WILDLAND URBAN INTERFACE AREAS, WITH FUEL MANAGEMENT TRACKS

Prof. Antonio Correia¹, Prof. Alexandra Ribeiro¹, Prof. Luís Santos², Prof. Susana Meneses¹

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PO89 (IWFC453) - A STATISTICAL MODEL TO ASSESS THE IMPACT OF POLICIES OF IGNITION LIMITATION IN PORTUGAL

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PO90 (IWFC83) - VOLUNTEER BRIGADES, INTEGRATED FIRE MANAGEMENT IN CONSERVATION UNITS AND THE RELEVANCE OF ORGANIZED CIVIL SOCIETY PARTICIPATION

Anderson de Freitas e Silva, Brigadas Voluntárias, o Manejo Integrado do Fogo em Unidades de Conservação e a Relevância da Participação da Sociedade Civil Organizada José Eugênio Cortes Figueira, Brigadas Voluntárias, o Manejo Integrado do Fogo em Unidades de Conservação e a Relevância da Participação da Sociedade Civil Organizada Alexandre França Tetto, Brigadas Voluntárias, o Manejo Integrado do Fogo em Unidades de Conservação e a Relevância da Participação da Sociedade Civil Organizada Giovana Bomfim de Alcantara

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PO91 (IWFC513) - FUEL MANAGEMENT OF FIRE-ADAPTED INVASIVE SPECIES - ONE SIZE DOES NOT FIT ALL

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PO92 (IWFC58) - INTEGRATED FIRE MANAGEMENT IN RESERVA NATURAL SERRA DO TOMBADOR - BRAZILIAN SAVANNA.

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PO93 (IWFC182) - EVALUATION OF THE FÓRMULA DE MONTE ALEGRE FOREST FIRE DANGER INDEX IN THE EAST REGION OF PARANÁ, BRAZIL

Heitor Ferreira¹, **Antônio Carlos Batista Antônio Carlos Batista¹**, Dr. Alexandre França Tetto¹, DR Daniela Biondi¹

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PO94 (IWFC212) - A FIELD EXPERIMENTAL TEST ON A MOCKUP OF STEEL SANDWICH PANELS SUBJECTED TO SHRUB FIRE

Cesare Fiorini¹, Phd Hélder D. Craveiro¹, Aldina Santiago¹, PhD Luís Laim¹

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PO95 (IWFC118) - PREVENTION AND PROTECTION OF FIRES IN RURAL URBAN AREAS**Gregorio Garcia¹**¹Universidad Politécnica De Madrid, Madrid, Spain**PO96 (IWFC181) - DEVELOPMENT OF A FIRE RISK INFORMATION SYSTEM (SIRI) FOR CONSERVATION UNITS IN THE CERRADO BIOME TO SUPPORT DECISION-MAKING****Dr Henrique Luis Godinho Cassol¹**, MSc Andeise Cerqueira Dutra¹, MSc Tânia B Hoffmann¹, Dr Egidio Arai¹, MSc Valdete Duarte¹, Dr Cesare Di Girolamo Neto², Dr Yosio Edemir Shimabukuro¹¹National Institute for Space Research (INPE), São José dos Campos, Brazil, ²Food4Sustainability, F4S, Lisboa, Portugal**PO97 (IWFC37) - CFD MODELLING OF LABORATORY-SCALE EXPERIMENTS REPRODUCING THE FIRE BEHAVIOUR OF LIVE VEGETATION AT WILDLAND URBAN INTERFACE (WUI)****Mr Bruno Guillaume¹**, Mr Bertrand Girardin¹, Dr Anne Ganteaume²¹Efectis France, Bordeaux, France, ²INRAE-RECOVER, Aix-en-Provence, France**PO98 (IWFC406) - ASSESSMENT OF FUEL TREATMENT DYNAMICS UNDER ELECTRIC POWER TRANSMISSION LINES****Dalila Lopes¹**, Ana Magalhães², Inês Lopes³, Prof. Paulo Fernandes^{1,2}¹CITAB - Centre for the Research and Technology of Agro-Environmental and Biological Sciences, UTAD, Vila Real, Portugal, ²ForestWISE - Collaborative Laboratory for Integrated Forest and Fire Management, Vila Real, Portugal, ³E-REDES, Portugal**PO99 (IWFC236) - EARLY WILDFIRE DETECTION AND GEO REFERENCING SYSTEM BASED ON OPTICAL VIDEO SURVEILLANCE CAMERAS****Andris Lurins¹**, Armands Dirins¹Amplicam, Riga, Latvia**PO100 (IWFC496) - ENHANCE THE KNOWLEDGE OF WILDFIRE IGNITION CAUSES AND MOTIVATIONS IN PORTUGAL AND SPAIN: PATH DEVELOPMENT, TRENDS AND NEEDS**Cláudia Nunes Magalhães¹, PhD Carmen Vázquez-varela², PhD José M^a MARTÍNEZ NAVARRO, **Dr****Fantina Maria Tedim**¹Faculty of Arts of University of Porto, Porto, Portugal, ²Department of Geography and Spatial Planning, Universidad de Castilla-La Mancha, Cuenca, Spain, ³Geography Department, Faculty of Arts of University of Porto, Porto, Portugal**PO102 (IWFC386) - FIRE HAZARD DIFFERENCES BETWEEN CONTIGUOUS FORESTS IN CENTRAL PORTUGAL****Aline Oliveira¹**, Ricardo Neves¹, Joaquim Silva¹, Elisa Moura¹¹Escola Superior Agrária, Instituto Politécnico de Coimbra, Coimbra, Portugal**PO103 (IWFC457) - FIRE BEHAVIOR IN THE LITTER LAYER IN PINE-OYAMEL AND PINE-OAK FORESTS****Ruben Ortiz Mendoza^{1,2}**, Marco A. González Tagle¹, Diego Rafael Perez Salicrup²¹Facultad de Ciencias Forestales, Universidad Autónoma de Nuevo León, Carretera Nacional km 145.

C.P. 67700. Linares, México, ²Centro de Investigaciones en Ecosistemas y Sustentabilidad, Universidad Nacional Autónoma de México, Antigua carretera a Pátzcuaro 8701. C.P. 58190. Morelia, México

PO104 (IWFC409) - THE ROLE OF VEGETATION IN FOREST FIRE DANGER RATING SYSTEMS: RISICO EXPERIENCE IN ITALY**Mr Nicolò Perello^{1,2}**, Dr Andrea Trucchia², Mr Mirko D'Andrea², Mr Giorgio Meschi², Dr Silvia Degli Esposti², Dr Paolo Fiorucci²¹University of Genova, Genova, Italy, ²CIMA Research Foundation, Savona, Italy**PO105 (IWFC95) - THE ROLE OF INTEGRATED FIRE MANAGEMENT ON CLIMATE CHANGE ADAPTATION FOR ECOSYSTEM SERVICES IN TROPICAL AND SUBTROPICAL REGIONS****Dr Núria Prat-Guitart¹**, Dr Imma Oliveras², Ms Mariona Borrás¹, Ms Helena Ballart¹, Ms Ariadna Goenaga¹, Dr Lucía de la Riva¹, Sr Juan Caamaño Azcárate¹, Mr David Martín¹, Mr Guillem Canaleta¹, Mr Guillem Armengol¹, Mr Jordi Vendrell Flotats¹¹Pau Costa Foundation, Taradell, Spain, ²Institut de Recherche pour le Développement, Montpellier, France**PO106 (IWFC432) - MANAGING POST-HARVEST RESIDUES IN EUCALYPT PLANTATIONS WITH PRESCRIBED FIRE - FIRSTS EFFECTS IN TOPSOIL AND STUMP SURVIVAL**Dr. Ana Quintela¹, Mariana Lima², Dr. Paula Maia², Dr. Oscar Pelayo³, Eng. Cláudio Teixeira¹, Sérgio Fabres¹, Doctor Jacob Keizer², **Dr. Sofia Corticeiro²**¹RAIZ, Forest and Paper Research Institute, Quinta de S. Francisco, 3800-783 Eixo, Aveiro, Portugal,²CESAM and Universidade de Aveiro, Campus Universitário de Santiago, 3810-193 Aveiro, , Portugal,³MED, Universidade de Évora, Pólo da Mitra, Apartado 94, 7006-554 Évora, Portugal**PO107 (IWFC369) - CATTLE GRAZING REDUCES FUEL LOADS ENOUGH TO LESSEN FIRE HAZARDS IN MANY GRAZED AREAS**Rangeland Management Specialist and Project Manager Felix Ratcliff¹, **Livestock And Natural****Resources Advisor Devii Rao²**, Livestock and Natural Resources Advisor Sheila Barry³, PhD Student Shane Dewees⁴, Wildlife Management Specialist - Agent Luke Macaulay⁵, Area Natural Resource/Watershed Advisor Royce Larsen⁶, Livestock and Range Advisor Matthew Shapero⁷, M.S. Student Rowan Peterson⁸, Adjunct Professor Wildfire Dynamics Max Moritz⁴, Livestock and Natural Resources Advisor Larry Forero⁹¹Lawrence D. Ford, Consultants in Rangeland Conservation Science, Felton, United States, ²University Of California Cooperative Extension, Hollister, United States, ³University Of California Cooperative Extension, San Jose, United States, ⁴University of California Santa Barbara, Santa Barbara, United States, ⁵University of Maryland Extension, Queenstown, United States, ⁶University Of California Cooperative Extension, Templeton, United States, ⁷University Of California Cooperative Extension, Ventura, United States, ⁸University of California Davis, Davis, United States, ⁹University Of California Cooperative Extension, Redding, United States**PO108 (IWFC514) - ANALYSIS OF THE IMPACTS OF WILDFIRES ON THE WAY OF LIFE OF THE INDIGENOUS POPULATIONS OF XINGU****Fernando Rodovalho¹**¹Instituto de Pesquisas Ecológicas, Rio de Janeiro, Brazil

PO109 (IWFC515) - EFFECTS OF TWO TRAINING PROGRAMS ON IMPROVING THE WILDLAND FIREFIGHTERS' PHYSICAL FITNESS

MD Fabio García-Heras¹, MD Jorge Gutiérrez-Gutiérrez¹, Dr Belén Carballo-Leyenda¹, MD Juan Rodríguez-Medina¹, Dr José Gerardo Villa-Vicente¹, **PhD Jose A. Rodríguez-Marroyo¹**

¹Department of Physical Education and Sports, Institute of Biomedicine (IBIOMED), University of León, León, Spain

PO110 (IWFC193) - FOREST AND LAND FIRE PREVENTION THROUGH ZERO-BURNING PRACTICES BY RURAL COMMUNITIES IN INDONESIA

Prof. Bambang Hero Saharjo, DR Hwan-ok MA, Mr. Heru Setyoko

¹Ipb University, BOGOR, INDONESIA, ²ITTO, Nishi-Ku, JAPAN, ³FIELD INDONESIA, SOUTH JAKARTA, INDONESIA

PO111 (IWFC248) - ASSESSING THE FIRE DANGER IN THE WILDLAND-URBAN INTERFACE OF AN ALPINE ENVIRONMENT

Msc. Mariana Silva Andrade¹, Dr. Mortimer M. Müller¹, MSc. Gergö Dioszegi¹, Dr. Harald Vacik¹

¹University of Natural Resources and Life Sciences, Vienna, Austria

PO112 (IWFC43) - FUEL MANAGEMENT IN THE SERRA DA CANASTRA NATIONAL PARK/ MINAS GERAIS/BRAZIL AS A STRATEGY TO CONTAIN LARGE FIRES;

Bianca Zorzi Tizianel¹, Fernando Tizianel, Carlos Bernardes, Helder Marques, Guilherme Silva Pinto

¹Icmbio, São Roque de Minas, Brasil

ADAPTIVE MANAGEMENT

PO113 (IWFC214) - A PRELIMINARY STUDY ON FOREST MANAGEMENT IN URBAN-FOREST INTERFACE AREAS IN THE MUNICIPALITY OF SERTÃO

Cátia Antunes¹, **Doutora Sofia Knapic¹**, Doutor Alfredo Dias¹

¹SerQ - Centro de Inovação e Competências da Floresta, Sertão, Portugal, ²SerQ - Centro de Inovação e Competências da Floresta, Sertão, Portugal, ³Universidade de Coimbra, Coimbra, Portugal

PO114 (IWFC501) - MAPPING THE ECONOMIC LOSS OF ECOSYSTEM SERVICES CAUSED BY THE FOREST FIRES IN LIGURIA, ITALY

Bushra Sanira Asif^{1,2}, Umberto Pernice², Dr Paolo Fiorucci², Mr Nicolò Perello^{1,2}

¹University of Genoa, Genoa, Italy, ²CIMA Research Foundation, Savona, Italy

PO115 (IWFC430) - CONTRIBUTION OF A VOLUNTARY FIRE BRIGADE (VFB) TO THE DECREASE OF AREAS AFFECTED BY WILDFIRE IN AN ATLANTIC FOREST PATCH

Contribution of a voluntary fire brigade (VFB) to the decrease of areas affected by wildfire in an Atlantic Forest patch Hallan Chimura², **Vinicius De Zorzi^{1,2}**, Contribution of a voluntary fire brigade (VFB) to the decrease of areas affected by wildfire in an Atlantic Forest patch Mateus Queiroz², Contribution of a voluntary fire brigade (VFB) to the decrease of areas affected by wildfire in an Atlantic Forest patch Daniela Fujiwara², Doctor Christian Berlinck², Contribution of a voluntary fire brigade (VFB) to the decrease of areas affected by wildfire in an Atlantic Forest patch Guilherme

Souza¹

¹The Nature Conservancy - Brazil, São Paulo, Brasil, ²SIMBiOSE, Atibaia, Brasil

PO116 (IWFC367) - WILDFIRE INSURANCE: WHAT ROLE IN EUROPE?

Ms. Teresa Deubelli-Hwang¹, Ms. JoAnne Linnerooth-Bayer¹

¹International Institute for Applied Systems Analysis, Laxenburg, Austria

PO117 (IWFC157) - FROM MANAGING THE FIRE TOWARDS GOVERNING THE SYSTEM: FACILITATING COEXISTENCE WITH WILDFIRES IN CYPRUS

Judith Kirschner¹

¹European University Cyprus - PyroLife, Cyprus

PO118 (IWFC451) - "DESIGNING" FOREST RESILIENCE UNDER CLIMATE CHANGE - BEYOND TREES AND FUEL LOAD

Dr. Paula Maia¹, Doctor Jacob Keizer², Dr. Paulo Fernandes⁴, Ph.D. David Carvalho³

¹CESAM, Departamento de Biologia, Universidade de Aveiro,, Aveiro, Portugal, ²CESAM, Departamento de Ambiente e Ordenamento, Universidade de Aveiro, ³CESAM, Departamento de Física, Universidade de Aveiro, ⁴ForestWise - Laboratório Colaborativo para a Gestão Integrada da Floresta e do Fogo, Vila Real, Portugal

PO119 (IWFC353) - SMOKE FROM WILDFIRES IN CONTAMINATED SITES BY RADIONUCLIDES: A MODELLING CASE STUDY

Tobias Osswald¹, Carla Gama¹, Vera Rodrigues¹, Dr Diogo Lopes¹, Dmytrii Holiaka², Prof. Sergiy Zibtsev², Victor Myroniuk², Valery Kashparov², Ana Isabel Miranda¹

¹CESAM and Department of Environment and Planning, University of Aveiro, Aveiro, Portugal, ²National University of Life and Environmental Sciences of Ukraine, Ukraine

PO122 (IWFC239) - RESULTS OF MONITORING OF LANDSCAPE FIRES IN UKRAINE IN RELATION TO MILITARY INVASION OF RUSSIAN FEDERATION TO UKRAINE IN 2022

Prof. Sergiy Zibtsev¹

¹Regional Eastern Europe Fire Monitoring Center, Kyiv, Ukraine

POST-FIRE INTERVENTION

PO124 (IWFC396) - MOLECULAR CHARACTERISATION OF FIRE-AFFECTED SOIL ORGANIC MATTER BY A 5TH GENERATION WILDFIRE IN SW-PORTUGAL

Ph.D. Nicasio T. Jiménez-Morillo^{1,2}, Ph.D. Nuno Guiomar^{1,3}, Ph.D. Ana Miller^{2,4}, Ph.D. José María De la Rosa², Ph.D. José Antonio González-Pérez²

¹MED-Universidade de Évora, Évora, Portugal, ²IRNAS-CSIC, Sevilla, España, ³EaRSLab, Earth Remote Sensing Laboratory-Universidade de Évora, Évora, Portugal, ⁴HERCULES Laboratory-Universidade de Évora, Évora, Portugal

PO125 (IWFC186) - USING THE FEMME TOOL FOR PLANNING EMERGENCY STABILIZATION IN A SPECIFIC BURNT AREA

Doctor Jacob Keizer¹, Josefine Döring¹, Dr. António Fernandes², Dr. Antonio Girona-García³, Phd Joana

Parente⁴, Dr. Ana Machado¹, Dr. Bruna Oliveira¹, Dr. Diana Vieira⁵

¹University of Aveiro, Aveiro, Portugal, ²University of Porto, Porto, Portugal, ³Biodiversity Research Institute (IMIB; CSIC-University of Oviedo-Principality of Asturias), Mieres, Spain, ⁴University of Lisbon, Lisbon, Portugal, ⁵Joint Research Centre (JRC), European Commission, Ispra, Italy

PO126 (IWFC518) - EVALUATION OF AREAS AFFECTED BY FOREST FIRES AND FIRES IN THE STATE OF MARANHÃO - BRAZIL BETWEEN 2001 AND 2021

Jhessyka Yasminni Lôbo¹, Mr Marcos Giongo², Jose Raimundo Costa Filho², Dra Aline Silvestre Pereira Dornelas Dornelas¹, Antônio Carlos Batista Antônio Carlos Batista³, Airton César da Silva Araújo¹, Michelle Menezes¹

¹Universidade Federal Do Tocantins, Gurupi, Brazil, ²Corpo de Bombeiros Militar do Maranhão, São Luis, Brasil, ³Universidade Federal do Paraná, Curitiba, Brasil

PO127 (IWFC465) - FIRE AS A TOOL FOR LAND USE CONVERSION IN THE ATLANTIC FOREST

Fernanda Lucas¹, Rita de Cássia Freire Carvalho¹, Mariana Aragão¹, Leonardo Duarte Biazatti¹, Antônio Henrique Cordeiro Ramalho², Nilton Cesar Fiedler¹

¹Universidade Federal Do Espírito Santo, Jerônimo Monteiro, Brazil, ²Universidade Federal do Sul e Sudeste do Pará, São Félix do Xingu, Brazil

PO128 (IWFC512) - FIRE IN MARGINAL ECOSYSTEMS OF THE ATLANTIC FOREST WITH MARINE INFLUENCE

Fernanda Lucas¹, Mariana Aragão¹, Leonardo Duarte Biazatti¹, Gabriel Severo Carvalho¹, Eduardo Machado da Silva¹, Nilton Cesar Fiedler¹

¹Universidade Federal do Espírito Santo, Jerônimo Monteiro, Brazil

PO129 (IWFC211) - THE EFFECT OF FIRE ON PHYSICAL AND CHEMICAL PROPERTIES SOIL OF ZAGROS FORESTS(CASE STUDY: SARVABAD CITY, KURDISTAN PROVINCE)

Bahman Moradi¹

¹Kurdistan General Directorate Of Natural Resources And Watershed Management, sanandaj, Iran

RISK HANDLING

PO130 (IWFC490) - CLIMATE CHANGE AND THE XINGU INDIGENOUS TERRITORY

Traiú Assalu Mehinaco¹

¹Indigenous from the Mehinako people of the Xingu Indigenous Park and collaborator of PrevFogo/Ibama in Brazil, Xingu, Brazil

PO131 (IWFC68) - THE EFFECT OF SPATIAL DEPENDENCE AND LAND COVER ON WILDFIRE RISK IN CASTELO-BRANCO AND GUARDA (PORTUGAL)

Jesús Barreal Pernas¹, Susete Marques

¹Complutense University of Madrid, Madrid, España

PO132 (IWFC389) - CHARACTERIZATION OF EXPOSURE TO AIR POLLUTANTS DURING FIREFIGHTING ACTIVITIES BY BIOMONITORING

MSc Bela Barros¹, MSc Ana Margarida Paiva¹, Dr Marta Oliveira¹, PhD Simone Morais¹

¹REQUIMTE-LAQV, Instituto Superior de Engenharia do Porto, Instituto Politécnico do Porto, Rua Dr. António Bernardino de Almeida 431, 4249-015 Porto, Porto, Portugal

PO133 (IWFC87) - MAPPING THE RISK OF FOREST FIRES IN PROTECTED AREAS THROUGH FUZZY LOGIC

Leonardo Duarte Biazatti¹, Nilton Cesar Fiedler¹, Antônio Henrique Cordeiro Ramalho², Mariana Aragão¹, Robert Gomes¹, Gabriel Severo Carvalho¹, Fernanda Lucas¹

¹Federal University of Espírito Santo - UFES, Jerônimo Monteiro, Brazil, ²Federal University of the South and Southeast of Pará - UNIFESSPA, São Félix do Xingu, Brazil

PO134 (IWFC276) - MAKING SCIENCE USABLE FOR FIRE WEATHER WARNINGS

Dr. Timothy Brown¹, Dr. Tamara Wall¹

¹Desert Research Institute, Reno, United States

PO135 (IWFC105) - FIRE FLOCKS PROJECT: PARTICIPATING FARMERS' PERCEPTIONS AND CONSUMER PREFERENCES FOR LABELING EXTENSIVE LIVESTOCK PRODUCTS PROVIDING WILDFIRE PREVENTION SERVICES

PhD Sergi Nuss-Girona², PhD Emma Soy-Massoni¹, **Mr Guillem Canaleta¹**, Mrs Ona Alay¹, Mrs Rut Domènech⁴, Dr Núria Prat-Guitart¹, Mrs Kathleen Uyttewaal^{1,5}, PhD Elsa Varela³, Mr Marc Arcarons¹, Mr Jonathan Troncho¹, Mr David Martin¹, Mr Jordi Vendrell Flotats¹

¹Pau Costa Foundation, Taradell, Spain, ²Geography Department and Environment Institute, University of Girona, Girona, Spain, ³Forest Science and Technology Centre of Catalonia (CTFC) Bioeconomy and governance, Solsona, Spain, ⁴Consorci de Polítiques Ambientals de les Terres de l'Ebre, Amposta, Spain, ⁵Water Systems and Global Change Group, Wageningen University, Wageningen, Netherlands

PO136 (IWFC331) - STATISTICAL MODELLING USING CATEGORICAL DATA FOR STUDYING RELATIONSHIP BETWEEN FIRES & PARAMETERS AND FOR CREATION OF FOREST FIRE RISK ZONATION

Dr. Sunil Chandra¹, Mr. Anoop Singh¹, Mr. Satyendra Kumar¹, Mr. Vikas Gusain¹

¹Forest Survey of India, Dehradun, India

PO137 (IWFC380) - STATISTICAL MODELLING USING CATEGORICAL DATA FOR STUDYING RELATIONSHIP BETWEEN WILDFIRES AND FIELD PARAMETERS FOR CREATION OF FOREST FIRE RISK ZONATION

Dr. Sunil Chandra¹, Mr. Anoop Singh¹, Mr. Satyendra Kumar¹, Mr. Vikas Gusain¹

¹Forest Survey of India, Dehradun, India

PO138 (IWFC296) - TOWARDS A MORE INTEGRATED APPROACH TO SOCIAL VULNERABILITY: THE CASE OF BARCELONA'S WUI

Dr Israel Rodríguez-Giralt, **Dr Maria Cifre-Sabater**, Dr Miriam Arenas-Conejo, Álvaro Poo-Astudillo

¹Universitat Oberta De Catalunya, Barcelona, Espanya

PO139 (IWFC167) - WILDFIRE RISK REDUCTION: THE ROLE OF ENVIRONMENTAL EDUCATION

Miss Conceição Colaço¹

¹CEABN-InBIO - Instituto Superior Agronomia, University of Lisbon, Lisbon, Portugal

PO140 (IWFC438) - USE OF COUPLED SIMULATIONS TO UNDERSTAND PYRO-CONVECTIVE ACTIVITY IN PORTUGAL

Dr Flavio T. Couto¹, Cátia Campos¹, Carolina Purificação¹, Filippe Santos¹, Roberta Baggio², Jean-Baptiste Filippi², Rui Salgado¹

¹University Of Évora, Évora, Portugal, ²University of Corsica Pascal Paoli – SPE, Corte, France

PO141 (IWFC473) - MAPPING OF ACTIVE FIRE FRONTS IN SENTINEL-2 IMAGES IN THE SERRA DO CIPO NATIONAL PARK - MG - BRAZIL

B.sc. Paulo Cunha¹, Dr. Fabiano Morelli¹, Henrique Bernini², Dr Daniela de Faria²

¹National Institute For Space Research (INPE), São José dos Campos, Brazil, ²Operations and Management Center of the Amazonian Protection System (CENSIPAM), Porto Velho, Brazil

PO142 (IWFC259) - PASTORAL FIRES AND THEIR IMPACT ON THE ALTO MINHO FIRE REGIME

Msc Emanuel de Oliveira¹, Prof. Paulo Fernandes

¹Universidade de Santiago de Compostela, Vila Nova de Cerveira, Portugal

PO143 (IWFC305) - PERCEPTION OF RISK AND CONFLICTS IN EVENTS IN DIFFERENT LOCATIONS IN FIREFIGHTING IN THE 2020 SEASON IN BRAZIL

Mrs Mônia Fernandes¹, Mrs Rafaela Souza²

¹Instituto Chico Mendes De Conservação Da Biodiversidade, Brazil, ²Instituto Chico Mendes De Conservação Da Biodiversidade

PO144 (IWFC166) - FIREFIGHTING TO FIRELIGHTING: CHALLENGES AND OPPORTUNITIES IN IMPLEMENTING INDIGENOUS BURNING IN CALIFORNIA

Dr. Nina Fontana, Dr. Beth Rose Middleton Manning

¹University Of California, Davis, Davis, United States

PO145 (IWFC229) - FOREST FIRE RISK ZONING IN PICO PARANÁ STATE PARK AND SURROUNDINGS, BRAZIL

Rafael Hartmann Gava¹

¹Ufpr, Curitiba, Brazil

PO146 (IWFC120) - A FRAMEWORK FOR QUANTIFYING WILDFIRE LIABILITY RISK FOR (RE)INSURANCE PURCHASING AND MITIGATION PURPOSES

Dr. Mark Hope¹

¹Guy Carpenter, Chicago, United States

PO147 (IWFC316) - MODELING HISTORICAL AND FUTURE FOREST FIRES IN SOUTH KOREA: THE FLAM OPTIMIZATION APPROACH

Hyun-Woo Jo¹, Dr Andrey Krasovskiy², Mina Hong³, **Ms Shelby Corning**², Whijin Kim¹, Dr. Florian Kraxner², Prof Woo-Kyun Lee¹

¹Department of Environmental Science and Ecological Engineering, Korea University, Seoul, Republic of Korea, ²Agriculture Forestry and Ecosystem Services (AFE) Group, Biodiversity and Natural Resources (BNR) Program, International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria, ³OJEong Resilience Institute (OJERI), Korea University, Seoul, Republic of Korea

PO148 (IWFC257) - FIRE RISK ASSESSMENT IN THE WILDLAND-URBAN INTERFACE (WUI) OF PORTUGAL TO PRIORITIZE PREVENTION OPERATIONS

Dr Yannick Le Page¹, Rita Nicolau², Dr. Manuel L Campagnolo³, Mário Caetano², Prof. José Miguel Cardoso Pereira³

¹Agency for Integrated Rural Fire Management, Lousã, Portugal, ²Direção-Geral do Território, Lisbon, Portugal, ³School of Agriculture, University of Lisbon, Lisbon, Portugal

PO149 (IWFC476) - FOREST FUELS MOISTURE CONTENT MONITORING AND ASSESSING THEIR BEHAVIOUR IN THE LIGHT OF NEW CLIMATIC CONDITIONS

Mr Sérgio Lopes¹, Professor Eusébio Conceição², Professor Joaquim Alonso³, Professor Domingos Viegas⁴

¹Polytechnic Institute of Viseu, Campus Politécnico, 3504-510, Portugal, ²University of Algarve, Campus de Gambelas, 8005-139, Portugal, ³Polytechnic Institute of Viana do Castelo, Rua D. Mendo Afonso, 4990-706, Portugal, ⁴University of Coimbra, Association for the Development of Industrial Aerodynamics, Rua Pedro Hispano, 12, 3031-289, Portugal

PO150 (IWFC254) - ASSESSING WILDFIRES SMOKE POTENTIAL IMPACTS

Dr Diogo Lopes¹, F.J. Alcasena², M. Bugaric³, M. Rodrigues⁴, Dr. Adrián Jiménez-Ruano⁴, Tobias Osswald¹, Vera Rodrigues¹, **Ana Isabel Miranda**¹

¹University Of Aveiro, Portugal, ²University of Lleida, Spain, ³University of Split, Croatia, ⁴University of Zaragoza, Spain

PO151 (IWFC317) - FIRE USE AND WILDFIRES IN AGRARIAN REFORM SETTLEMENT PROJECTS IN THE SOUTHWEST OF TOCANTINS STATE, BRAZIL

Gisele Milare^{1,2}, Angélica Giarolla¹, Maria Isabel Escada¹

¹Instituto Nacional de Pesquisas Espaciais, São José dos Campos, Brazil, ²Instituto Nacional de Colonização e Reforma Agrária, Palmas, Brazil

PO152 (IWFC437) - USING MACHINE LEARNING FOR SHORT-TERM WILDFIRE HAZARD ESTIMATION

Julia Gottfriedsen¹, Dmitry Rashkovetsky¹, Dominik Laux¹, Johanna Streb¹, Max Helleis¹, Dr.-Ing. Martin Langer¹

¹OroraTech GmbH, Munich, Germany

PO153 (IWFC161) - INSURANCE SOLUTIONS FOR CALIFORNIA WILDFIRE; FINANCIAL QUANTIFICATION OF COMMUNITY AND LOCATION LEVEL MITIGATION

Kimberly Roberts¹, Sydney Chamberlin², Manuel Chiroze

¹Guy Carpenter, Fort Collins, United States, ²The Nature Conservancy

PO154 (IWFC139) - WILDFIRE PREPAREDNESS AND IMPACTS NEEDS ASSESSMENT FOR CALIFORNIA, USA

Ms Barbara Satink Wolfson¹

¹University Of California Cooperative Extension, Hollister, United States

PO155 (IWFC66) - INDIGENOUS PERCEPTION OF CLIMATE CHANGE AND HEALTH IMPACTS OF FOREST FIRES IN THE BRAZILIAN AMAZON

Ana Schramm¹, Sandra de Souza Hacon¹, Angela Ostritz², Maíra Laeta³, Luiz Carlos Ferreira Penha⁴, M.sc. Ananda Andrade⁵, Kumessi Waura⁶, Mandei Amondowa⁷, Celiana Cypcwjy Krikati⁸, Patrícia Cruz Tenharim⁹, Cleudes Gomes de Araujo Shanenawa¹⁰, Jonair Nrômekwa Xerente¹

¹National School of Public Health - Oswaldo Cruz Foundation, Rio de Janeiro, Brazil, ²Cooperação Social / Inovação, Fundação Oswaldo Cruz, Fortaleza, Brazil, ³Department of Vertebrates, Federal University

of Rio de Janeiro, Rio de Janeiro, Brazil, ⁴Coordination of Indigenous Organizations of the Brazilian Amazon, Manaus, Brazil, ⁵University of Brasília, Department of Geography, Brasília, Brazil, ⁶Kuikuro People, Parque Xingu Indigenous Territory, Brazil, ⁷Amondowa People, Uru Eu Wau Wau Indigenous Territory, Brazil, ⁸Krikati People, Krikati Indigenous Territory, Brazil, ⁹Tenharim People, Tenharim Marmelos Indigenous Territory, Brazil, ¹⁰Shanenawa People, Katukina Kaxinawá Indigenous Territory, Brazil, ¹¹Xerente People, Xerente Indigenous Territory, Brazil

PO156 (IWFC129) - RISKS ASSOCIATED WITH THE OCCUPATIONAL EXPOSURE OF FIREFIGHTERS DURING WILDLAND FIRES

Miss Joana Teixeira¹, PhD Simone Morais¹, Dra Francisca Rodrigues¹, Dra Alice Santos-Silva², Dra Cristina Delerue-Matos¹, Dr Marta Oliveira¹

¹REQUIMTE/LAQV - Instituto Superior de Engenharia, Instituto Politécnico do Porto, Portugal, ²UCIBIO/REQUIMTE, Laboratório de Bioquímica, Departamento de Ciências Biológicas, Faculdade de Farmácia, Universidade do Porto, Portugal

PO157 (IWFC364) - CLIMATE CHANGE AND THE IMPACT ON THE FINE FUELS MOISTURE CONTENT AFFECTING FOREST FIRE INTENSITY

Gilberto Vaz^{1,2}, Jorge Raposo^{1,2}, Daniela Alves², Luís Reis², Professor Domingos Viegas²

¹Coimbra Polytechnic - ISEC, Coimbra, Portugal, ²Univ Coimbra, ADAI, Department of Mechanical Engineering, Coimbra, Portugal

PO158 (IWFC264) - EXTREME FIRE BEHAVIOUR ANALYSIS AND MODELLING

Professor Domingos Viegas¹, Carlos Ribeiro, Thiago Barbosa

¹Univ Coimbra, ADAI, Department of Mechanical Engineering, Coimbra, Portugal

TECHNICAL VISITS

As part of the **8th IWFC**, Technical Visits in English-speaking are available to participants upon registration. The locations for technical visits are conveniently located in and around Porto. **Round-trip travel from the Conference venue to the venues is arranged for groups up to 50 participants with a minimum of 20 (each).**

1) VILA POUCA DE AGUIAR

Monday, 15th May 2023 - 8:00 AM to 6:00 PM

Price: 70€

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Addresses the problem of abandonment of mountain pastures, particularly in common areas, the increase in the intensity of summer rural fires, the reduction of the stock of carbon sequestered in the organic matter of soils in mountain areas and the effective reduction of the Maronesa breed.

Its main objective is to improve the climate resilience of livestock farms and promote increased carbon retention in soil organic matter.

The project is based on a demonstration model of agricultural and livestock practices, which have been integrated by a vanguard producer, and which will be integrated into four replication areas, through producers who follow this exploration model.

The intervention areas are located in the 4 most representative municipalities of Solar da Raça Maronesa, Vila Pouca de Aguiar, Vila Real, Ribeira de Pena and Mondim de Basto, the region with the highest number of Maronesa cattle farms.

PROGRAM:

8:00 AM | Departure from Porto – Alfândega do Porto Congress Center

10:15 AM | Reception - Ferreirinho, Telões

10:30 AM | Visit to the Maronesa Life Project

12:45 AM | Cocktail-style lunch at Casa de Telões

2:30 PM | Departure to the Adventure Park from Ribeira de Pena

3:30 PM | Activities in the Adventure Park*

6:00 PM | Return to Porto

* Please note that If you want to book the “Fantasticable” activity (Aventura Park, Ribeira de Pena), you can purchase it on site for €25



2) REN | FOREST DEFENSE NETWORKS - PARQUE SERRAS DO PORTO

Monday, 15th May 2023 - 3:00 PM to 6:00 PM

Price: 30€

VAT included

In Portugal, REN has about 10,000 kilometres (around 36,000 hectares) of power line and gas pipeline easements, with more than 66% of these easements (23,000 hectares) in forest areas. In the last five years, REN has managed vegetation on more than 44,000 hectares (7,200 hectares in 2022). Due to the company's relevance in defending the Forest, REN has been implementing a series of vegetation management strategies that, in addition to providing security to its infrastructure, increase the resilience of the territories to the risk of wildfires.

In addition to learning in detail about REN's vegetation management strategy, during this initiative this technical visit will include the presentation of a system that monitors the forest through optical cameras, while simulating and predicting the fire's behaviour (a project involving the University of Coimbra and whereness).

Additionally, we will look at a plan to enable a territory (Serras do Porto Park) to fight wildfires, based on the facilities already present on the land, with the participation of ForestWISE (collaborative laboratory that promotes the integrated management of forest and fire, based on (co)research and development activities, knowledge transfer, and technology), Parque Serras do Porto (municipal entity that manages the land), REN (the energy infrastructure manager present in the land), and The Navigator Company (one of the world's leading players in the pulp and paper industry and one of the largest owners of that territory).

REN will also demonstrate two pioneering machines for clearing forests and preventing fires - the RAP-TOR 100 and the RAPTOR 300, which have improved silviculture and fuel management operations and made the defence of forests against fires more effective.

ABOUT REN

REN - Redes Energéticas Nacionais is the company that manages the main electricity and natural gas transmission facilities in Portugal. REN is also operating in the natural gas distribution business through the development and management of the gas distribution network in the northern coastal region of Portugal. REN is also involved in the telecommunications business through RENTELECOM, which covers a variety of services relating to infrastructure, managed services, and consultancy. In compliance with all required quality and safety standards, REN aims to be one of the most efficient electricity and natural gas transmission system operators in Europe. The company also holds a 42.5% stake in the share capital of Electrogas, which operates a natural gas transmission system located in central Chile, and, in 2019, acquired Transemel, an electricity transmission company predominantly located in northern Chile.

PROGRAM:

3:00 PM | Departure for technical visit -
Alfândega do Porto Congress Center

4:00 PM | Welcome - João Gaspar - Sustainable
Networks and Easements of REN and Carlos
Fonseca - CTO of ForestWISE

4:10 PM | Vegetation Management: REN's
Strategy - Pedro Marques

4:25 PM | Resilience Networks of Serras do Porto
Park - Carlos Fonseca - ForestWISE

4:40 PM | Fire simulator - José Moreira - REN
and Carlos Viegas - University of Coimbra

5:00 PM | Demonstration of forest cleaning and
fire prevention machines - Raptor 100 and 300 -
Tomás Marques - Bermarthor

5:30 PM | Closing

6:00 PM | Return and arrival at the Alfândega do
Porto Congress Center



SOCIAL PROGRAM

Don't miss out on this unique opportunity to network and make meaningful connections with fellow colleagues. We look forward to seeing you there!

WELCOME COCKTAIL

ALFANDEGA DO PORTO EXHIBITION AREA

15th May 2023 | 6:00 PM to 8:00 PM

The 8th IWFC opens its doors with a unique event held at the **Alfândega do Porto Congress Center**. During the two hours that mark the **Exhibition Opening**, you can socialize with the industry and top global experts in the sector.



CONFERENCE DINNER



PALÁCIO DA BOLSA

18th May 2023 | 8:00 PM to 11:00 PM

Price: 70€

VAT included

This is a unique networking opportunity that will take place in a historic and singular building in Porto, Portugal - the **Palácio da Bolsa**. The neoclassical palace is a landmark of the city's architectural beauty. It is located in R. Infante D. Henrique, in the historic center of Porto, designated a **UNESCO World Heritage Site**.

CULTURAL PROGRAM

This program proposes a contemporary perspective on the element of fire, as a mediator between humankind and the universe, using as a starting point the mythological narratives, which over the centuries have inspired intellectuals and artists. It also intends to transform the current narratives around fire, as a purely destructive element, and extend this urgent discussion to the Arts and Humanities, in order to mobilize different audiences for the common mission of fire prevention and sustainable fire management.

AND BENEATH IT ALL FLOWS LIQUID FIRE - JULIAN CHARRIÈRE [2019]

16th - 19th, May 9:00 AM to 7:00 PM

Salão Nobre, Alfândega do Porto

Video installation where the omnipresence of fire and its absurd coexistence with opposing elements, such as water or ice, is discussed. Charrière reverses the traditional iconography of the fountain as a source of life, presenting it as a fountain in flames to demonstrate the paradox of its existence.



FIRE & OF THE LIGTHEN LAND RITA CASTRO NEVES AND DANIEL MOREIRA [2018]

16th - 19th May 9:00 AM to 7:00 PM

Salão Nobre, Alfândega do Porto

Of the Lighten Land presents a landscape and its opposite, to think about the destruction of the territory and human behaviour, rekindling old wounds. Fire presents an animation where two charred sticks are controlled by two hands in a gestural choreography, which aims to understand the fires of an enigmatic visual alphabet.

FIRE SCIENCE: FROM CHEMISTRY TO LANDSCAPE MANAGEMENT

17th May 2:30 PM

D. Maria Room, Alfândega do Porto

Presentation of this important research by Francisco Castro Rego (UL), Penelope Morgan (UO), Paulo Fernandes (UTMAD) and Chad Hofman (CSU).



PYROCENE: CONVERSATION AROUND FIRE

18th May 6:00 PM

Infante Room, Alfândega do Porto

On the occasion of the release of the Portuguese edition of The Pyrocene by Stephen Pyne (Ziguarte Livros), the author, Viriato Soromenho Marques and Carlos Vaz Marques will discuss the evolution of man's relationship with fire from the perspective of history and philosophy in order to broaden the debate and help transform current narratives about fire as a purely destructive element.

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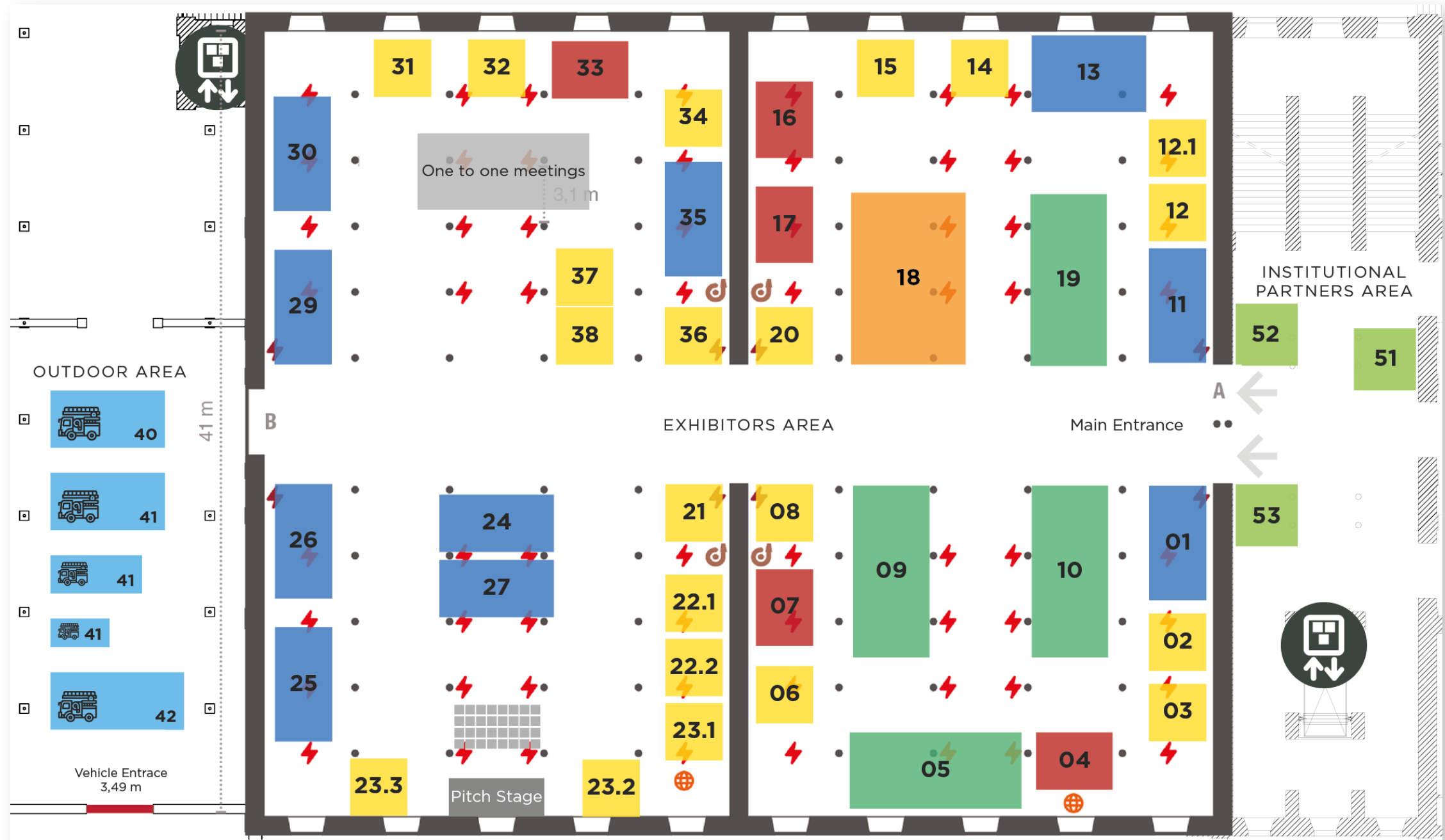
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2nd FLOOR

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