



16 October 2024

Mrs. Klodiana Marika, Director
Department of Nature and Forests
Ministry of Tourism and Environment
Blvd. Zhan D'Ark, Norbert Jokl 23
Tirana, Albania

Dear Mrs. Marika,

We are writing to invite you and your delegation to participate in a series of events at COP16 to address the widespread and increasing impact of wildfire on biodiversity across the world.

It is well understood that wildfire is an essential process in many ecosystems and has played a prominent role in the evolution of biodiversity. However, due to rapid global changes in climate, land use, management actions, and vegetation, extreme wildfire events are increasing and natural fire regimes are being altered beyond their natural range of variability.

Altered fire regimes are leading to widespread and profound ecological transformations, posing serious threats to global biodiversity, and in some areas are driving large-scale species extinctions. The ecological effects of wildfire are occurring independently and synergistically with other global change agents, often with cascading impacts and compounding effects (e.g. Canada's 2023 wildfires released nearly 4 times more carbon than global aviation ([WRI](#))). Solutions to the climate and biodiversity crises are urgently needed.

When fire regimes are altered beyond their natural range of variability, ecosystem functioning can collapse and damage natural systems and biodiversity ([Source](#)). A recent [special issue](#) in the journal *Fire* highlights effects of wildfire on biodiversity across world regions, e.g.

- 2019-2020 bushfires in **Australia** killed about 3 billion animals, and many species became endangered as a result. Australia has the highest rate of **mammal loss**, and bushfires put more than 700 [insect species](#) at risk of extinction. ([Source](#))
- **Bolivia** has 58 Key Biodiversity Areas across all ecoregions, most of which are also identified as Important Bird Areas. Pressure exerted by the increasing incidence of wildfire threatens the survival of **avian species** dependent on these areas. ([Source](#))
- **Colombia** has experienced unprecedented wildfires, impacting *paramos* (**high-altitude wetlands**) in 2024 ([Source](#)). Further, the city of Cali is now experiencing historic wildfire incidents and damage to area ecosystems ([Source](#)).
- Forest fires in **northwestern Africa** are increasing in frequency, intensity, and area, and the area's diverse **insect populations**, which provide vital ecosystem services like pollination and decomposition, are suffering a precipitous decline ([Source](#)).
- In west-central **Spain**, protected areas (particularly those dominated by **pine/mixed forests**) are at the highest risk of large fires, suggesting a need to shift from halting to managing fires and anticipating how ecosystems respond to burns. ([Source](#)).

The [Conservation Biology Institute](#) (CBI) is leading the creation of a global [Wildfire Academy](#), which will educate and empower people to foster community and ecological resilience to wildfire. The Wildfire Academy is to be framed within a Wildfire Collective of international partners, with the intent to advance, share and apply leading-edge research and practice in wildfire management and conservation science.



We feel it is critical to bring a comprehensive discussion of wildfire threats to biodiversity into official proceedings and negotiations of the CBD and the Global Biodiversity Framework. To this end, CBI and co-host [CREAF](#) submitted a proposal for an official COP16 side event on wildfire (see [Annex 1](#)). Since this side event was not officially approved, we have planned these side events on biodiversity and wildfire near the Green Zone (see [CBI at COP16](#) for details):

- **Global Challenges to Sustaining Biodiversity in an Era of Changing Fire Regimes** (Panel discussion + reception) ([Registration link](#))
Friday 25 October (14:00-17:00)
Riostudio Cali (Av. 4 Oeste, #4-84)
- **International viewpoints on developing community & biodiversity resilience to wildfire under global change** (Interactive workshop + working lunch) ([Registration link](#))
Monday 28 October (9:00-13:30)
Riostudio Cali (Av. 4 Oeste, #4-84)

The Wildfire Collective stands ready to support CBD Member States, local and Indigenous communities to increase wildfire resilience and accelerate recovery through these channels:

- Convene decision makers, practitioners, and community members to share experiences in wildfire resilience and recovery at UN CBD COP16 events (as described above).
- Facilitate and co-create country- and community-specific training on wildfire resilience and recovery through the Wildfire Academy (to be launched in 2025).
- Facilitate regional workshops in the run-up to COP17 with CBD Member States, in concert with international partners in the growing Wildfire Collective.

We respectfully urge CBD Member States to take this urgent opportunity to highlight the rising frequency of wildfires and growing impacts to biodiversity through these actions:

- Include wildfire impacts to biodiversity and identify needs to increase wildfire resilience in your revised National Biodiversity Strategies and Action Plan (NBSAP).
- Support concerted high-level action with peer CBD Member States to raise the profile of wildfire resilience in reporting on GBF indicators (and also in NDCs and VNRs).
- Urge the CBD Secretariat to include wildfire resilience as a central item on the agenda for COP17 (and in interim sessions leading up to CBD COP17 and UNFCCC COP30).

We appreciate your kind consideration, and we look forward to your response.

Yours faithfully,

Conservation Biology Institute (Oregon, United States)

Robin Jones, Executive Director (robin.jones@consbio.org)

Dr. Alexandra D. Syphard, Senior Global Change Research Scientist (asyphard@consbio.org)

Karl Peet, Senior Advisor, Global Strategy (karl.peet@consbio.org)

Ecological and Forestry Applications Research Centre (CREAF) (Catalunya, Spain)

Dr. Lluís Brotons, Research Scientist (l.brotons@creaf.uab.cat)

Alicia Perez-Porro, Head, Policy Engagement & Institutional Relations
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Fire Centre Research Hub, University of Tasmania (Tasmania, Australia)

Dr. David Bowman, Director (david.bowman@utas.edu.au)



Annex 1: CBD COP16 Official Side Event Proposal: Biodiversity & Wildfire Resilience

Title: **Global challenges to sustaining biodiversity in an era of changing fire regimes**

CBD Topics: Capacity-building, Indigenous/local communities, Technical cooperation

GBF Targets: T08 (Minimize Impacts of Climate Change on Biodiversity); T20: (Strengthen Capacity-Building, Technology Transfer, and Scientific & Technical Cooperation)

Background

Wildfire is an essential ecological process in many ecosystems and has played a prominent role in the evolution of biodiversity. In response to rapid global change, however, extreme wildfires are increasing and natural fire regimes are being altered, posing serious threats to biodiversity driving large-scale species extinctions, and compounding climate change impacts: for instance, Canada's 2023 wildfires released nearly 4 times more carbon than global aviation ([WRI](#)).

Given increasingly devastating impacts of wildfires on human communities, effective fire management strategies are urgently needed to protect people; yet, many fire management approaches can also cause substantial ecological harm and create conflicts with biodiversity conservation. Thus, there is a critical need to identify solutions that can improve human safety while also preserving biodiversity. Identifying these solutions is highly complex given that wildfires are changing differently in different regions for different reasons.

Global objectives for biodiversity conservation cannot be met without accounting for the critical role of wildfire in shaping ecosystem functioning. Strategies and support are needed to (1) advance interdisciplinary scientific research and innovation; (2) foster collaborative collection of open-source, comprehensive, geographically relevant, and accurate data; (3) ensure evidence-based decision-making through communication between scientists and practitioners; (4) understand and account for geographical diversity in social and ecological systems; and (5) provide widespread education for and collaboration across a range of stakeholders.

Event Objectives

1. Gathering worldviews on changing fire regimes (illustrated with case studies)
 - a. What is the natural role of fire in each region's ecosystems?
 - b. How is fire changing and why?
 - c. What are the prominent human and ecological impacts?
 - d. How is fire being managed, and by whom?
 - e. What are the biggest gaps in science, management strategy, implementation?
2. Identifying means to grow international resources for addressing extreme wildfires and changing fire regimes
 - a. What resources already exist?
 - b. What resources are most needed? (e.g., data, science, education, management)
 - c. Strategies to develop adaptive and collaborative education and data platform
3. Coordination, communication and resources (e.g. CBI-led [Wildfire Academy](#) & Collective)
4. Contribute inputs to CBD COP17, UNFCCC COP30, and [World Fire Congress](#) in 2026.



Participants (TBC)

- **Co-Hosts:** Conservation Biology Institute (CBI), Ecological and Forestry Applications Research Centre (CREAF)

- Speakers

- Dra. Alexandra D. Syphard, Conservation Biology Institute, US
- Dr. Lluís Brotons, Ecological and Forestry Applications Research Centre, Spain
- Dr. Stijn Erik R. Hantson, Associate Professor, Universidad del Rosario, Faculty of Natural Sciences, Colombia
- Dra. Ghislane Echeverry Prieto, Director, Institute of Hydrology, Meteorology and Environmental Studies, Colombia
- Dr. Mauricio Aguilar Garavito, Pontifical Xavierian University, Colombia (remote)
- Dr. Mauro González, Universidad Austral de Chile, Instituto de Conservación Biodiversidad y Territorio (remote)
- Dra. Iokiñe Rodríguez Fernández, University of East Anglia, UK/Venezuela (remote)
- Mr. Ricardo Lozano, Minister of Environment and Sustainable Development (2018-2020), Colombia (invited)
- Mr. Anacleto Peña, Union of Indigenous Communities of Lomerío, Bolivia (invited)
- Dr. David Bowman, Fire Centre Research Hub (by video)

Working Agenda (90 minute format)

- 10 minutes **Opening Remarks and overview of global changes in natural fire regimes**
Moderator: Alexandra Syphard, Conservation Biology Institute
Dr. David Bowman, Fire Centre Research Hub (by video)
- 10 minutes **Framing Topic 1: Impact of extreme fire events on native forests**
Dr. Mauricio Aguilar Garavito, Pontifical Xavierian University, Colombia OR
Dr. Stijn Erik R. Hantson, Associate Professor, Universidad del Rosario, Faculty of Natural Sciences, Colombia
- 10 minutes **Framing Topic 2: Predicting effects of human drivers and fire on biodiversity**
Dr. Lluís Brotons, Ecological and Forestry Applications Research Centre (CREAF)
- 45 minutes **Panel Discussion: Global challenges to sustaining biodiversity in a new era of fire**
- *Dra. Iokiñe Rodríguez Fernández, University of East Anglia*
 - *Dra. Ghislane Echeverry Prieto, Director, Institute of Hydrology, Meteorology and Environmental Studies, Colombia*
 - *Mr. Ricardo Lozano, Minister of Environment and Sustainable Development (2018-2020), Colombia*
 - *Mr. Anacleto Peña, Union of Indigenous Communities of Lomerío*
- 15 min **Discussion and closing**
Facilitated by moderator