







# wildfirescapes RESILIENCE THROUGH LANDSCAPE ARCHITECTURE



# TOPIC

The aim of this workshop is to provide a wider perspective on Wildfires to be considered in Landscape architecture planning and design to reduce uncertenty and vulnerability to wildfires and enhance landscape resilience and resistence to wildfires.

The European metropolitan areas have entered into the categorization of major wildfire risk areas, due to the increasing vulnerability in a climate change context.

The Metropolitan Area of Barcelona has become an urban-forest system of 4.5 million people in direct contact with 3 Natural Parks and where a range of international infrastructures are located and converge. In a potential wildfire situation (5th generation wildfire), the collapse of the emergency system is almost assured, in addition to the enormous effect on the economic system from the zero point. In terms of natural hazards emergency, it is considered as global emergency because a wildfire would trigger all kinds of emergencies. Following the principle of cultural action of fire (1st people,2nd goods and 3rd forest), the response to minimize damage would not be able to attend the wildfire itself.

The international community on wildfire management recognizes the incapacity to resolve and deal with the problem strictly from the field of emergencies. Moreover, it demands the urgent need to establish ways of collaboration and involvement of professionals from other disciplines.

We cannot deal with these issues thinking that we are facing a strictly ecological, social or economic problem: it is a subject of landscape in its full complexity.

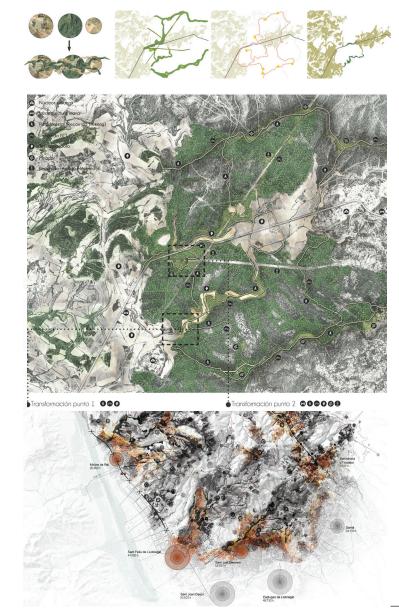
This work is the result of a transdisciplinary collaboration between the Catalonian wildfire community: GRAF+ Pau Costa Fundation; the Forest Science and Technology Center of Catalonia (CTFC) and the MBLandarch-ETSAB of the Politechnical University of Barcelona.

According to M.E.Korstranje, the risk is perceived when it is prefigured: "A lot of sociologists have conceived the construction risk as a culture (...) There is no risk outside of language and the linguistic code. No one can avoid what you cannot prefigured in the moment happens that risk is not a risk but an accomplished opponent. Any risk is at a future time. "(Korstanje, M.E., 2014)

Wildfire planning has the objective to convey the linguistic code of risk through representation, and make it visible, entering into a purposeful and informative debate that allows us to take decisions.

The main objective of this workshop is to introduce wildfires problematic intro landscape project to reduce vulnerability and preserve landscape values, enhancing the capacity of response towards wildfire disturbance.

For this purpose, we need to incorporate the dynamic condition of the landscape, characterized by cycles of transformation and intrinsic disturbance into the planning and decision-making tools and a transformative perspective that embrace change on different scales.



# **OBJECTIVES**

#### 1- Identification of socio ecological processes in wildfire landscapes. Temporal perspective

Wildfires are inherent in the evolutionary dynamics of forest systems, and climate change emphasizes them. The way they spread and affect us is a reflection of our use and relation with the territory. Changes in land use in the Mediterranean basin have led to a homogenization of the landscape that emphasizes its vulnerability to fires, while reducing the ecological value in proportion to the loss of the agroforestry mosaic.

#### 2- Mapping wildfire behavior and vulnerability

Landscape planning and mapping allows to build "firesmart" landscapes with forest structures and spatial distribution patterns that contribute to difficult the fire spread and facilitate the extinction of wildfires. But also, they allow to identify areas at most risk for the population or for the ecosystems.

Knowing the patterns of fire behaviour, the fire regime and the forest structure allows to better recognise the landscape vulnerability in front wildfires and to apply solutions for increasing ecosystems resilience.

#### 3- Recognition of landscape change agents

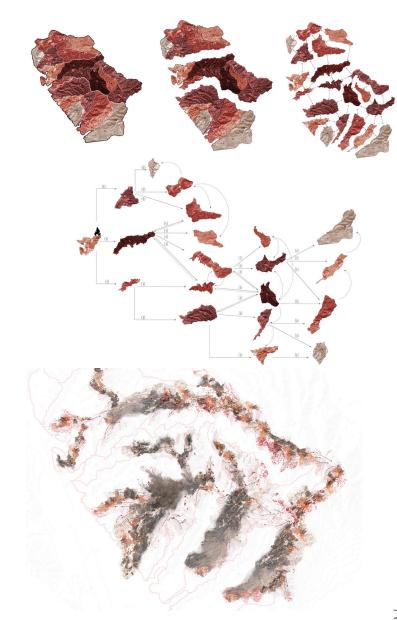
Wildfire disturbance is directly related to a situation of loss of value and change of meaning that represents the rural world. Without having an added benefit value, it is difficult to recognize agents from the territory who can work on fire prevention and who can generate prevention, management strategies and reveal landscape value (economic, cultural and social value).

We need to recognize in the landscape which are the agents of transformation or change who have the capacity to transform the landscape, increasing resilience. For this reason, it is necessary to recognize the existing and potential agents of territory: neighbours, farmers, potential tourists and managers ... and search for new implications with the landscape, both in their capacity for transformation and in the character and identity features that they give to the landscape.

#### 4- Recognition of opportunity spaces and Masterplan

Opportunity spaces are places where the project is effective. These places are identified because the project action involves a low energy cost and because they synergize with the dynamics of nature recovery and work in coalition.

For example, a channel supposes a place where a series of conditions converge: accumulation of sediments, therefore of nutrients, presence of water, a recognizable place, and often identity, and it is also a public domain. In these places a single project action responds efficiently to various functions.



# \_SCHEDULE

BCN WILDFIRESCAPES OPENING Enric Batlle, director of MBLandArch	04/11/2019 (2nd DAY) 00 hrs BCN WILDFIRESCAPES INSTITUTIONAL	05/11/2019 (3rd DAY) 9:00 hrs	06/11/2019 (4th DAY) 9:00 hrs	07/11/2019 (5th DAY) 9:00 hrs	08/11/2019 (6th DAY) 9:00 hrs
BCN WILDFIRESCAPES OPENING Enric Batlle, director of MBLandArch		9:00 hrs	9:00 hrs	9:00 hrs	9:00 hrs
SITE PRESENTATION  Pena Moran+ Marc Castellnou, workshop	WELCOME (Félix Aranguren/Enric Batlle/Carles Crosas)				
SITE VISIT (ETSAB-CORREDOR_MONTNEGRE)  FIELDWORK	MASTERCLASS OF WILDFIRE PLANNING	WORKSHOP DESIGN: ESTRATEGY AND MASTERPLAN	PRESCRIBED BURNING VISIT	WORKSHOP  MANAGEMENT: management plan development	EXHIBITION SET UP ( Final presentation document)
PRESCRIBED BURNING AREA 13:	3:30 hrs	13:30 hrs	13:30 hrs	13:30 hrs	13:30 hrs
	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
18:	WORKSHOP FIRST APPROACH  3:00 hrs	WORKSHOP DESIGN: ESTRATEGY AND MASTERPLAN	14:30 hrs WORKSHOP  MANAGEMENT: management plan development  18:00 hrs  MANAGEMENT, BIOECONOMY	WORKSHOP DESIGN: SCENARIOS OF COEXISTENCE 18:00 hrs INTERNATIONAL LECTURER	FINAL PRESENTATION  18:30 hrs
	LECTURE GRAF		LECTURE 20:00 hrs	INTERNATIONAL LECTURER 20:00 hrs	BCN WILDFIRESCAPES INSTITUTIONAL CLOSING Félix Aranguren/Enric Batlle SNACK & GOODBYE

### ORGANIZATION

This workshop is organized by the Master degree on Landscape Architecture MBLAndarch of the Barcelona School of Architecture (ETSAB) and the School of Agricultural Engineer (ESAB) of the UPC. In colaboration with the Pau Costa Fundation (PCF). This transdisciplinary collaboration is an opportunity to join different perspectives to wildfire landscapes that provide tools to incorporate wildfires into landscape planning to encrease landscape architecture resilience.

#### MBLANDARCH ETSAB-UPC

MBLANDARCH studies are aimed to give an updated response to the complexity of landscape, preparing professionals to intervene in all professional fields with an interdisciplinary approach: the project of public and private space, the project of natural systems, restoration of degraded areas, planning and planning of protected areas, infrastructure adjustment to the territory, planning for sustainable development and implementation of new environmental standards. MBLandArch has the support of the College of Agriculture of Barcelona of the UPC and counts with the participation of different departments, teachers and professionals from other technical disciplines. MBLandArch has partnerships and exchanges with various international universities and belongs to EMILA (European Master of International Landscape Architects), a joint program with other European universities (Amsterdam, Edinburgh, Hannover and Versailles) that gives the opportunity to pass the second and third semester at two different universities, obtaining the corresponding recognition. MBLandArch is recognized by the EFLA (European Federation of Landscape Architects), an international association that recognizes and accredits the professional activities of landscape architects and landscape designers.

#### \_Workshop organization:

\_MBLandArch Director:

Enric Batlle, Dr. architect

\_Workshop directors:

Marc Castellnou, Strategic Fire Analyst, Area Chief, GRAF, Catalan Fire Service Pepa Morán, landscape architect, professor of the MBLandArch- ETSAB-UPC

\_Workshop professors:

Anna Zahonero, biologist and landscape architect, professor of the MBLandArch- ETSAB-UPC Rut Domènech, biologist and PhD in forest fires, researcher at Forest Science and Technology Centre of Catalonia (CTFC)

Jordi Castellví, GRAF, Catalan Fire Service

Etel Arilla, GRAF, Catalan Fire Service

\_Assistent Professor:

Lidia Carrillo Parra, landscape architect, professor of the MBLandArch- ETSAB-UPC











