

## Marc Castellnou

### Head of the Catalan special firefighting unit GRAF on large wildfires

Marc Castellnou grew up in the rural drylands of Southern Catalonia and experienced first-hand the frequent large wildfires in his homeland mountains. His rural upbringing led him to forest management, studying fire ecology and the use of prescribed fires to obtain a degree in forest engineering. Castellnou combined his local knowledge with advanced training and went to the US to study fire modelling and fire suppression. Recognized as one of the few experts in Catalonia in fighting large wildfires with fire, he was given the opportunity in 1999 to create a new special firefighting unit (GRAF) from scratch that would look at the wildfire from another perspective, challenging the historical perspective aimed at the elimination of fire from the ecosystem.



### Wildfire: Rethinking risk management in human-environment systems

Thursday, 15 May 2014, 17 ct, Bild Wissen Gestaltung

Wildfires are one of the most commented and visible disturbances in our forests; wildfire risk management is a hot topic in climate change agendas. While wildfires represent an important ecological process, they also significantly impair the function of forests as a buffer to climate change.

How can we manage wildfires? Why do we fight them so aggressively? Why do our forests burn? All those questions have one common factor: fuel buildup. Fire is a complex system, as complex as all the processes influencing vegetation growth and death. Fuel buildup occurs because of i) socioeconomic and land-use changes; ii) our particular perception of forest management; and iii) our lack of understanding of the role of fire in our ecosystems.

We are now managing wildfire in a similar way to how we used to manage big predators: trying to eradicate them. Current wildfire solutions have created the wildfire paradox – eradication today leads to larger wildfires tomorrow – and as a consequence the new fires are worse, larger and more intense. Far from solving a disturbance that occurred mostly at the stand level, we are now facing a disturbance operating and driving changes at the landscape scale.

Fire ecology and fire landscape architecture are the basic concepts to build a new approach to wildfire. Marc Castellnou's lecture will use case studies in Catalonia, Ireland and Germany to show his understanding of wildfire management needs. It will specifically focus on how we as a society can approach, agree upon and create consensus around reducing the wildfire risk, and how we can increase certainty about landscape management and learn to live with fire as part of it.

## THESys Science in Action

Marc Castellnou

### Wildfire: Rethinking risk management in human-environment systems

Thursday, 15 May 2014, 17 ct, Bild Wissen Gestaltung

This event is part of the Ecology Days Berlin.

### All Thesys Lectures in Summer Semester 2014

Marc Castellnou: Wildfire: Rethinking risk management in human-environment systems

Thursday, 15 May 2014, 17 ct, Bild Wissen Gestaltung

Anthony Patt: Solving climate change as a problem of innovation and co-benefits

Thursday, 19 June 2014, 17 ct, Grimm-Zentrum

Almo Farina: Soundscape Ecology: the new frontier in ecology

Thursday, 10 July 2014, 17 ct, Erwin-Schrödinger-Zentrum

#### Location

Humboldt-Universität zu Berlin  
Bild Wissen Gestaltung  
Sophienstr. 22a, 10178 Berlin  
(2nd courtyard, 2nd floor)



ecology  
days  
a nomadic  
conference  
ecological thinking and practice in  
urban contexts. berlin, 5/12 - 5/16

