

MEDIA RELEASE

NEWS FROM THE UNIVERSITY OF TASMANIA

DATE: FRIDAY 16 SEPTEMBER 2011

ATTENTION: Chiefs of Staff, News Directors



Our relationship with fire

UTAS Professor David Bowman is the lead author of a paper that offers a historical framework for considering the complex relationships humans have with fire.

The paper appears in the *Journal of Biogeography* and was produced by a team of 18 international researchers working at the National Center for Ecological Analysis and Synthesis (NCEAS) at the University of Santa Barbara.

Professor David Bowman said this framework is key to planning for future fire risk and understanding the role of fire in natural ecosystems.

“There are often needless debates about whether or not fire has any place in flammable landscapes,” he said.

“These debates are not helpful because of the intertwined relationships among humans, landscapes and fire throughout human history, which blur any distinction between natural and human set fires.

“The value of this study is that it presents a critical assessment of the diversity of human uses of fire, from tamed landscape fire, to agricultural fire, to industrial fire.”

Dr. Jennifer Balch is a Postdoctoral Associate at NCEAS and second author on the paper.

“Human use and misuse of fire has been so prevalent in our evolutionary history, and the evolution of cultures, that we’ve forgotten how dominant a force fire really is,” she said.

The researchers’ analysis recognises four ‘fire phases’:

1. Natural fires that occur regardless of humans
2. Tame fire used by hunter-gatherers to manage landscapes for game and wild food production
3. Agricultural fire used to clear land, grow food and burn fallow
4. Industrial fire to power modern societies, that have switched from using living to fossilised plants as the primary fuel.

All these phases still occur today. However, the problem is that the excessive combustion of fossil fuels is driving climate change.

“Our fossil-fuel dependent economy is yet another extension of our dependence on combustion. We have effectively put fire in a box,” Dr Balch said.

“The result of massive dependence on this one use of fire may ultimately overwhelm human capacities to control landscape fire, given more extreme fire weather and more production of fuels.”

The research highlights that understanding the relative influences of climate, human ignition sources, and cultural practices in particular environments is critical to craft sustainable fire management to protect human health, property, ecosystems and greenhouse gas pollution.

“Understanding humankind’s relationship with fire is of great importance for all of us,” Prof Bowman said.

Information Released by:

The Media Office, University of Tasmania

Phone: (03) 6226 7489 or 0418 510 121

Email: chcooper@utas.edu.au