

# Public awareness and attitude towards forest fires: a case study in Ticino, southern Switzerland

Michael Reinhard<sup>1</sup>, Martine Rebetez<sup>2</sup>, Rodophe Schlaepfer<sup>1</sup>

## Abstract

In Ticino, southern Switzerland, forest fires occur every year during the dry winter season. Changes in climate patterns, particularly the occurrence of more intense droughts, have led to potentially more fire-prone conditions. The milder climate over the past century has resulted in changes to the species composition of Ticino's forests, particularly at lower elevation, where exotic evergreen broad-leaved species have invaded. Some of these species produce very flammable litters. Since the middle of the 20<sup>th</sup> century, the fuel load in the forests has increased as the result of changes in species composition and the abandonment of traditional agro-forestry. During the dry season, which includes late autumn, winter, and early spring, only 4% of fires are caused by lightning strikes and the remainder have anthropogenic origins. Preparedness measures in Ticino are mainly a result of collaboration between Cantonal Forest Agency, fire brigades and the local meteorological service. There is a focus on fire suppression.

We assessed the perception and attitude of local communities towards forest fires. A postal survey was sent to households in all regions of Ticino, enquiring about people's relationship to the forests, and their perception of forest fires and prevention methods. The results indicated that, despite a positive attitude towards the forests, 'naturalness' is not always perceived to be positive. Forest fires are of concern, but are not seen to be the most important forest issue for Ticino. Mechanisms leading to fires are not very well understood, although many people identify correctly some technical aspects. The critical season (November to April) is not recognised as more risky than the warm summer season. Attitude and background knowledge varied with location, gender, age, profession, marital status, income and life-style. Differences between these socio-demographic and geographical groups imply that preventive education needs to be better targeted and that the population cannot be treated as a homogeneous entity. Authorities may need to target particular social groups in different ways.

**This abstract is submitted for a presentation during the Thematic session #5, "Fire at the wildland/residential and urban interfaces".**

---

<sup>1</sup> EPFL - Swiss Federal Institute of Technology, ECOS - Laboratory of Ecological Systems, ENAC - School of Architecture, Civil & Environmental Engineering, Station 2, CH-1015 Lausanne, Switzerland.

<sup>2</sup> WSL – Swiss Federal Research Institute, Forest Ecosystem Processes Group., P.O. Box 96, CH-1015 Lausanne, Switzerland.