environmental sciences proceedings

Abstract

The Intermed Project †

Virginie Tihay-Felicelli [1,*], Domenico Di Nardo [2], Francesca Lantero [3], Eric Maillé [4], Olivier Riffard [5], Costantino Sirca [6] and Annalaura Vannuccini [7]

[1] SPE UMR CNRS 6134, Université de Corse, 20250 Corte, France
[2] UOC Foreste e Protezione Civile, Unione dei Comuni della Versilia, 55047 Seravezza, Italy
[3] Dipartimento Territorio—Settore Protezione Civile, Regione Liguria, 16121 Genova, Italy
[4] Institut National de recherche pour l'agriculture, l'alimentation et l'environnement (INRAE), Aix Marseille Université, Unité de Recherche RECOVER, 130182 Aix-en-Provence, France
[5] Direction de la Forêt et de la Prévention des Incendies, Collectivité de Corse, 20187 Ajaccio, France
[6] Dipartimento di Agraria, University of Sassari, 07100 Sassari, Italy
[7] Associazione Nazionale Comuni Italiani (ANCI) Toscana, 50122 Firenze, Italy
* Correspondence: tihay_v@univ-corse.fr
† Presented at the Third International Conference on Fire Behavior and Risk, Sardinia, Italy, 3–6 May 2022.

Abstract: INTERMED (Interventions pour gérer et réduire le risque d'incendie à l'interface habitat-espace naturel) deals with the fire risk at Wildland Urban Interface (WUI) and brings together Collectivité de Corse, University of Corsica, INRAE, University of Sassari, Regione Liguria, Associazione Nazionale Comuni Italiani Toscana and the Union of Municipalities of Versilia. The objective is to identify the fire risk at WUI and to define effective means to reduce their vulnerability. INTERMED is divided into three parts: The identification and mapping of fire risk at WUI, realized by the Collectivité de Corse, the University of Sassari and INRAE. This part develops methodologies for fire-risk assessment in the WUI areas and WUI fire-risk mapping at a fine scale, including both hazard and vulnerability components. The second part is an assessment of the vulnerability of buildings, linked to the vegetation around buildings, performed by the University of Corsica and INRAE. The objective is to provide recommendations for landscaping arrangements around buildings at WUI to reduce construction vulnerability. This part is based on real-scale experiments and numerical simulations. The third part is a test of pilot actions realized by Regione Liguria, Associazione Nazionale Comuni Italiani Toscana, INRAE and Union of Municipalities of Versilia. In this part, the following actions are proposed: the creation of the project platform for a Spatial Decision Support Tool to assess buildings' vulnerability; the creation of small infrastructures to reduce the risk of WUI fires in a residential area of Quercianella; the creation of three firewise communities in the municipalities with high fire risk; the realization of a hazard map regrouping a susceptibility map and a potential fire-line intensity map; the purchase of a prototype vehicle to assist people in WUI areas and a telecommunication kit for fire fighters; finally, the creation of evacuation routes and safe waiting areas for tourists and citizens in the forest complex of the Pineta di Levante.

Keywords: fire risk; WUIs; mediterranean basin; vulnerability

Citation: Tihay-Felicelli, V.; Di Nardo, D.; Lantero, F.; Maillé, E.; Riffard, O.; Sirca, C.; Vannuccini, A. The Intermed Project. *Environ. Sci. Proc.* **2022**, *17*, 47. https://doi.org/10.3390/environsciproc2022017047

Academic Editors: Pierpaolo Duce, Donatella Spano, Michele Salis, Bachisio Arca, Valentina Bacciu and Grazia Pellizzaro

Published: 10 August 2022

Author Contributions: Project administration, O.R.; investigation, V.T.-F., D.D.N., F.L., E.M., O.R., C.S. and A.V.; writing—original draft preparation, V.T.-F., D.D.N., F.L., E.M., O.R., C.S. and A.V.; writing—review and editing, V.T.-F. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by the project "INTERMED" (Interventions pour gérer et réduire le risque d'incendie à l'interface habitat-espace naturel) financed by the fund PC IFM 2014-2020.

Conflicts of Interest: The authors declare no conflict of interest.