Fire in the Earth System Abstracts

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Fire geographies in Sardinian landscapes: a placename based approach.

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Abstract

Fire is an intrinsic element of terrestrial ecosystems, especially in the Mediterranean Basin, as a natural factor and above all as an anthropic tool used to manage vegetation and shape landscapes. Over time, the increasing awareness in the use of fire has affected Mediterranean ecosystems and supported the creation of settlement and agricultural practices. Rural landscapes of Sardinia (Italy) were and are frequently marked by fire occurrence. In recent decades, a mix of socio-economic and fire management factors influenced fire regimes, which presented a general decreasing trend in annual fire number and area burned. However, both land abandonment and the increasing frequency of extreme weather and climate conditions are exacerbating the risk of mega-fire occurrence, as those observed in 2009 or in 2021. This is leading to a growing attention on the role played by prevention activities in mitigating wildfire risk, and from this point of view the use of controlled fires in agreement with local communities and needs can represent a valid tool to manage fuels in specific areas. The traditional use of fire for fuel management purposes was well known in several areas of Sardinia: "narbonare" is the term used in Sardinian language to refer to this practice. Cartographic reconnaissance of ancient and modern maps has allowed to recover a heritage of over two hundred pyrotoponyms linked to the term "narbone" all over the island, presented here as a geography of the use of fire as a shaping agent of the Sardinia landscape and rural culture. In this work, we analyzed the areas in which "narbones" place-names were located, and explored their characteristics in terms of environmental factors (e.g.: topography, bio-climate, etc.) as well as of current land uses.

Keywords: firescapes, pyronomastic, Sardinia, prescribed burning

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