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Fire as a natural and human factor shaping the Mediterranean Ecosystems. The Montgó forest fire and the teaching for the Geograns (older than 55) students

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Cerdà and Civera (2012); Fernández Raga et al., (2013) and Cerdà et al., (2014) show that teaching Earth Sciences to students older than 55 is a new challenge for the universities of developed countries due to the higher life expectancy and the arrival of new students and teaching programs to the academy.

Fire, due to the background of many of our students, is one of those topics that need more attention when teaching to students older than 55. Most of them see the fire as the enemy and not as a part of the natural and human ecosystems. The view of the scientists is based in the scientific method, and they see the fire as part of the ecosystems and the human societies (Roebroeks and Villa, 2011; Archibald et al., 2012; Berna et al., 2012; Romme et al., 2012; Zumbrunnen et al., 2012). Moreover, the studies developed on the soils, vegetation and hydrological response of fire affected land, show that the fire disturbance use to be short and the ecosystems return to the pre-fire period after a window of disturbance (Cerdà and Lasanta, 2005; Doerr and Cerdà, 2005; Lasanta and Cerdà, 2005; Granjed et al., 2011; Pérez Cabello et al., 2012; Bodí et al., 2013; Guenon et al., 2013; León et al., 2013: Pereira et al., 2013; Pereira et al., 2015; Prats et al., 2015), and this is related to the policies applied in different countries (Carreiras et al., 2014). More recent advances in the impact of fire on soils can be found in Bento-Gonçalves et al. (2012)

This research show the different strategies that we apply to explain the students older than 55 to understand the natural processes that are involved in nature due to the fire. The lectures are developed at the lectures room as an introduction about the fire in the Earth System and how the fire modify the soils, the water resources and change the vegetation cover, and 10 hours of field work in an recently fire affected land. The second part of the course, 10 hours in the field, will be done in February during a visit to the recently fire affected land in the Montgó Mountain in Eastern Spain.

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