

Population and major wildfires

Doctor, Alfonso M.

Universidad de Huelva

Abstract

Paper carried out within the CILIFO project (Iberian Centre for Research and Fight against Wildfires) (<https://cilifo.eu>), of the Interreg Spain-Portugal Cross-border Cooperation Programme (POCTEP), in its subproject B.1.2.2. Characterisation of historical wildfires, where anthropic factors of major fires (LWF, larger than 100 hectares) were studied. The relationship between the two was analysed, taking from the former the most cited in the scientific literature. The influence of demographic evolution on the production of LWF was approached by crossing population data at the municipal scale with the spatial distribution of the affected areas in the province of Huelva, the most forested and with the most LWF in Andalusia. Within the context of wildfires as a complex phenomenon, the results indicate that their determinant is not the mere population loss -because it takes place in areas both not affected and heavily affected by LWF- but loss of inhabited places and resident population outside the municipal capitals, which requires to focus, within the framework of policies for both fire prevention and fight against rural depopulation, not so much on the maintenance/recovery of the population as on secondary settlements.

Keywords: wildfires, depopulation, CILIFO, Huelva.

References

- Bento, A., et al. A desestruturacao do mundo rural em áreas de montanha e o risco de incêndio - o caso da Serra da Cabreira (Vieira do Minho). *Territorium*, 17, 109-117 (2010).
[HTTPS://DOI.ORG/10.14195/1647-7723_17_11](https://doi.org/10.14195/1647-7723_17_11) Bento, A., et al. Changes in mainland Portuguese forest areas since the last decade of the XXth century. *Méditerranée*, 130 (2018).
<https://journals.openedition.org/mediterranee/10025#text> Calvo, L. Severidad de grandes incendios en sistemas forestales propensos al fuego: condicionantes, efectos y soluciones de gestión pre- y post-incendio. Curso de verano El futuro de los incendios forestales: nuevas tecnologías y territorios resilientes. Universidad de León (2020).
Carnicer, J., Alegria, A., Giannakopoulos, C. et al. Global warming is shifting the relationships between fire weather and realized fire-induced CO₂ emissions in Europe. *Sci Rep* 12, 10365 (2022).
<https://doi.org/10.1038/s41598-022-14480-8> Collantes, F., & Pinilla, V. Peaceful Surrender: The Depopulation of Rural Spain in the Twentieth Century. Newcastle. Cambridge Scholars Publishing (2011). <http://dx.doi.org/10.1016/j.ihe.2016.03.003> Del Molino, S. La España vacía. Viaje por un país que nunca fue. Madrid. Turner (2016).
Doctor, A.M. Territorio e incendios forestales. Sevilla. Consejería de Medio Ambiente, Junta de Andalucía (2004).
Fernandes, S., & Lourenço, L. Grandes incendios florestais de março, junho e outubro (for a do periodo crítico) en Portugal continental.

Territorium 26 (II), 15-34 (2019). https://doi.org/10.14195/1647-7723_26-2_2 Fernández-Manso, A. ¿Cómo crear territorios resilientes a los incendios forestales?. Curso de verano El futuro de los incendios forestales: nuevas tecnologías y territorios resilientes. Universidad de León (2020).

Fonseca, I., & Freire, D. «Bárbaros sin libertad». Resistencia y agitación en las comunidades de montaña contra la acción de los servicios forestales en Portugal (1926-1974), in Sebastián, J.A., y Uriarte, R. (ed.): Historia y economía del bosque en la Europa del Sur (siglos XVIII-XX), 195-224. Zaragoza. Prensas Universitarias de Zaragoza (2003).

www.researchgate.net/publication/310590097_Barbaros_sin_libertad_Resistencia_y_agitacion_en_las_comunidades_de_montana_contra_la_accion_de_los_servicios_forestales_en_Portugal_1926-1974

Ghermandi, L., et al. From leaves to landscape: A multiscale approach to assess fire hazard in wildland-urban interface areas. *Journal of Environmental Management*, vol. 183, 3, 925-937. (2016). <https://doi.org/10.1016/j.jenvman.2016.09.051>

Lourenço, L. Forest fires in continental Portugal. Result of profound alterations in society and territorial consequences. *Méditerranée*, 130 (2018). <https://doi.org/10.4000/mediterranee.9958>

Nunes, A., et al. Três décadas de incêndios florestais em Portugal: incidência regional e principais fatores responsáveis. *Cadernos de Geografia*, 32, 133-143 (2013). <http://repositorium.sdum.uminho.pt/bitstream/1822/25045/1/Cadernos%20de%20Geografia%2032%20pg%20133-143.pdf>

Tedim, F., et al. Os grandes incêndios florestais em Portugal. Desafios para a gestão do risco, in Bento, A., & Vieira, A. (ed.): *Grandes incêndios florestais, erosão, degradação e medidas de recuperação dos solos*, 75-86. Núcleo de Investigação em Geografia e Planeamento, Universidade do Minho (2013). <http://repositorium.sdum.uminho.pt/handle/1822/28593>

Acknowledgments: Irene Gómez Millán, Researcher contracted by the University of Huelva.