CRISTINA R. MONTIEL Full Professor, Department of Geography Complutense University of Madrid, Spain

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VITAL STATISTICS:

Born May 4, 1965, Alicante, Spain. EU citizen. Three (University students) children (1992, 1997, 1998)

SHORT BIOGRAPHY:

Cristina Montiel is a Full Professor of Geography and Chair of the Research Group on Forest Geography, Policy, and Socioeconomics at the Complutense University of Madrid (UCM), Spain. She held several positions as a lecturer in the University of Alicante before. She has also been a Visiting Scholar at the Institute of the Environment and Sustainability of the University of California, Los Angeles (UCLA), a Visiting Fellow at the Department of Geography of the University of Provence (France) and a Visiting Academic at the University of Melbourne (Australia). She has served as Head of the Department at UCM from July 1st 2010 to November 7th 2017.

Prof. Montiel has received numerous national and international awards over the course of her academic career including the Graduate National Award, the University Award for Excellence in Teaching (for the academic years 2005-06, 2014-15, and 2015-16, and the period 2014-17), the National Award for Publications on Agriculture, Fisheries and Food (1994) and the Golden Award for Fire Research (2016). Her domains of experience and expertise are the social sciences applied to spatial planning, sustainable development and forest management.

She has participated in and coordinated several national and European projects (INTERREG IIIB, Integrated Project in the 7th Framework Program, COST Actions, ERANET Networking actions). She has also been very active in promoting discussion, participation and collaboration among public institutions and private stakeholder for rural development. She has been a member of several scientific European committees, steering committees and supervisory boards. Currently, she is an expert research advisor for the European Commission.

RESEARCH INTERESTS:

Social Sciences, Geography and spatial planning, public policies assessment, governance mechanisms, Environmental History, natural hazards, Pyrogeography, fire use practices and wildfire risk, forest policy and socioeconomics.

DEGREES:

Ph.D. (with distinction), University of Alicante, Geography 1992
Bachelor (Highest Honors), University of Marseille II (France), Geography, 1990
Master, University of Alicante, Spatial Planning, 1989
Bachelor (Highest Honors & Graduate National Award), University of Alicante, Geography and History, 1988

ACADEMIC CAREER:

- 2007 Full Professor, Department of Geography, Complutense University of Madrid
- 1997 Chair, Research Group Forest Geography, Policy and Socioeconomics, Complutense University of Madrid
- 2010 2017 Head, Department of Regional Geographical Analysis and Physical Geography, Complutense University of Madrid
- 2005 2006 Visiting Professor, Department of Geography, University of Provence (France).
- 1996 2007 Associate Professor, Department of Regional Geographical Analysis and Physical

Geography, Complutense University of Madrid.

- 1993 1996 Associate Professor, Department of Regional Geographical Analysis and Physical Geography, University of Alicante (Spain)
- 1988 1993 Assistant Professor, Department of Regional Geographical Analysis and Physical Geography, University of Alicante (Spain).

SCHOLARSHIPS, FELLOWSHIPS, HONORS:

Visiting Professor at the Universita'Degli Studi Di Napoli Federico II (Italy), Dipartimento di Agraria, 2019.

Visiting Professor at the University of California, Los Angeles (UCLA), Department of Geography, 2019.

Visiting Academic at the University of Melbourne (Australia), School of Ecosystem and Forest Sciences, 2018.

International scientific leadership recognition: "Recognizing women leaders in fire science: revisited", *Fire*, 2018,1, 45.

Co-recipient, "El Batefuegos de Oro" (Golden Fire Swatter) Award, Category Best Research, 2016.

University Award for Excellence in Teaching: for the academic years 2005-06, 2014-15, and 205-16, and for the period 2014-17.

Visiting Scholarship at the University of California, Los Angeles (UCLA), Department of Ecology and Evolutionary Biology & La Kretz Center for California Conservation Science, 2015.

First Prize, Scientific Poster Award, in the European COST Strategic Conference "Global Change and Sustainable Development in Mountain Regions" (Innsbruck-Switzerland, 7-9 April 2008), for an outstanding poster presentation. Topic of the presented poster: "Tradition, renovation and innovation of land uses in Mediterranean mountain areas", 2008.

Complutense Research Award, for the work entitled "Estructura de la propiedad forestal en la provincia de Soria. Génesis y propuestas de gestión de los patrimonios societarios", 2007.

University Award for Excellence in Teaching: one of the top ten teachers at Complutense University of Madrid, for the academic year 2005-06.

National Award for Publications on Agriculture, Fisheries and Food: Second Prize for the work entitled "Los montes de utilidad pública en la Comunidad Valenciana", 1994

SERVICE:

Expert Research Advisor, European Commission, H2020 RTD-ENV-EXPERTS, 2017

Committee member, Doctoral Programme in Geography, Complutense University of Madrid, 2013-2017

Faculty Council member, Faculty of Geography and History, Complutense University of Madrid, 2010-2017.

Deputy Coordinator, ERANET Network Action FORESTERRA-MedWildFireLab, 2014-2017

Consultation Panel member, 7th EU Environmental Action Programme, 2012.

Supervisory Board member, Fire Ecology and Management Pau Costa Foundation (PCF), 2011-2015

Board of Directors member, European Integrated Project FIRE PARADOX, 2006-2010

International Expert Group on cultural values in sustainable forest management criteria & indicators member, Ministerial Conference for the Protection of Forests in Europe, 2006-2007

National Panel of Advisors member, European Research of Innovation Project "Sustainable management of Europe's natural resources, GoFOR", 6th Framework Program, 2004-2006

Steering committee member, INTERREG IIIB-SUDOE Programme "Organisation of networks and cooperation actions for the Mediterranean forests", 2003-2005.

Management Committee member, Editorial Board member and Task-force leader, European COST Action E27, Protected Forest Areas in Europe: analysis and harmonisation, European Commission, DG XII-AP, 2002-2006

Working Group member, European COST Action E19, National Forest Programmes in a European context, European Commission, DG XII-AP, 1999-2003

Board of Directors member, International Association of Mediterranean Forests (IAMF), 1999-2004

Research project proposal reviewer: FORMAS Review Panel for a call on Forest Fire in Central Sweden. The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning, 2014 & 2018; Spanish Ministry of Economy and Competitiveness, 2016

Manuscript reviewer: Forest Policy and Economics; Landscape Ecology; International Journal of Wildland Fires; Annals of Forest Sciences; Land Use Policy; Land Degradation & Development; Environment, Development and Sustainability; Environmental Planning Management; Forest; Sustainability.

Membership: International Association for Society and Natural Resources (IASNR), Association of Women Scientists and Tecnologists (AMIT), Royal Economic Society of Friends of the Country in Valencia, Pau Costa Foundation (PCF)

LANGUAGE COMPETENCE:

Spanish: native French: fluent English: professional working proficency Catalán: limited working proficency

FUNDED RESEARCH (last 10 years):

ERANET-FORESTERRA Networking Accion. Ref. PCIN-2013-138-C04-01. Global Change Impacts on Wildland Fire Behaviour and Uses in Mediterranean Forest Ecosystems, towards a « wall less » Mediterranean Wildland Fire Laboratory (MedWildFireLab). 12 partners. Funded by the European Commission & European countries. UCM funding €71,000. Coord Rego, Dep-Coord & PI Montiel. 2014-2017.

National Research Project of Excellence. Ref. CSO2017-87614-P. *Reconstruction of fire scenarios in the inner regions of the Iberian Peninsula through the geo-historical sources, 18th-20th centuries,* FIRESCENARIOS. Funded by the Spanish Scientific Research Ministry €24,200. PI Montiel. 2018-2021.

National Research Project of Excellence. Ref. CSO2013-44144-P. *Fire regimes and rural landscape dynamics in Sistema Central and Sierra Morena mountain ranges*, FIRESCAPE. Funded by the Spanish Scientific Research Ministry €75,000. PI Montiel. 2014-2017.

National Research Project of Excellence. Ref. CSO2010-21788-C02-01. *Historical geography of wildland fires in Spain: Central mountain ranges (GEOINFOR)*. Funded by the Spanish Scientific Research Ministry €30,000. PI Montiel. 2011-2013.

European Integrated Project, VI FP, Ref FP6-018505. An innovative approach of integrated wildland fire management regulating the wildfire problem by the wise use of fire: solving the FIRE PARADOX. Funded by the European Commission, VI Framework Programme. Total budget €12,618,961. 36 partners. UCM funding €445,544 Coord. Rego. UCM PI Montiel. 2006-2010.

SELECTED PUBLICATIONS:

Books

Presencia histórica del fuego en el territorio. Madrid: Ministerio de Agricultura, Alimentación y Medio Ambiente, 2013.

Best Practices of Fire Use - Prescribed Burning and Suppression Fire Programmes in Selected Case-Study Regions in Europe. Joensuu: EFI Research Report 24, 2010. Edited with D. Kraus.

Towards Integrated Fire Management. Joensuu: EFI Policy Brief 4, 2010. With F. Rego; E.Rigolot; P. Fernandes and J. Sande Silva

Los montes de utilidad pública en la Comunidad Valenciana. Madrid: Ministerio de Agricultura, Pesca y Alimentación, 1995.

Propiedad forestal de raigambre señorial en tierras valencianas. Alicante: Instituto de Cultura "Juan Gil-Albert"- Generalitat Valenciana, 1995.

Articles/Book Chapters

Camarero, J., Sanguesa, G., Pérez-Diaz, S., Montiel, C., Seijo, F., López-Saez, J.A. (2019) Abrupt regime shifts in post-fire resilience of Mediterranean mountain pinewoods are fueled by land use, *International*

Journal of Wildland Fire, https://doi.org/10.1071/WF18160

Montiel, C., Karlsson, O., Galiana, L. (2019) Regional fire scenarios in Spain: linking landscape dynamics and fire regime for wildfire risk management, *Journal of Environmental Management*, 233: 427-439.

Montiel, C. (2018) La presencia histórica del fuego en el territorio, in García-Novo, F., Casal, M., Pausas, J. (ed) *Ecología de la regeneración de zonas incendiadas*, pp. 113-130.

Montiel, C., Galiana, L. (2018) El impacto del fuego, in Reinares, M.A.: 25 años BRIF. Un relato forjado a fuego, pp. 47-66.

Camarero, J.J., Sangüesa-Barreda, G., Montiel, C., Seijo, F. López-Saez, J.A. (2018) Past growth suppressions as proxies of fire incidence in relict Mediterranean black pine forests, *Forest Ecology and Management*, 413:9-20.

San Miguel, J., Chuvieco, E. Handmer, J., Moffat, A. Montiel, C., Sandahi, L., Viegas, D. (2017) Climatological risk: wildfires, in Poljansek, K., Martin Ferrer, M., De Groeve, T. Clark, IL, (eds.): *Science foe disaster risk management 2017: knowing better and losing less*. EUR 28034 EN, Publications Office of the European Union, Luxembourg, doi:10.2788/688605, JRC102482, pp. 294-305.

Montiel, C. & Galiana, L. (2016) Fire scenarios in Spain: a territorial approach to proactive fire management in the context of global change, *Forests*, 7,273. doi: 10.3390/f7110273.

Held, A, Castellnou, M., Conedera, M., Montiel, C. (2015) State-of-the-Art on Forest Risks - Wildfire, in European forests at risk. A scoping study in support of the development of a European Forest Risk Facility, *Chapter: 3.1*, Publisher: EFI, Editors: Guy Landmann, Alexander Held, Andreas Schuck, Jo van Brusselen, pp. 20-31

Montiel, C. (2015) Análisis y evaluación de los trabajos de la División Hidrológico-.Forestal del Júcar, *Montes*, 121:5-11.

Montiel, C. (guest editor), 2013: *Méditerranée Special Issue: Les grands incendies de forêt en Méditerranée*. Vol. 121. Presses Universitaires de Provence.

Montiel, C. (2013) Investigación geohistórica sobre las causas de los incendios forestales, *Montes*, 114:17-21

Montiel, C. (guest editor), 2013: Forest Policy and Economics Special Issue: The FIRE PARADOX project Setting the basis for a shift in the forest fire policies in Europe. Vol. 29. Elsevier.

Montiel, C. (2013) Comparative assessment of wildland fire legislation and policies in the European Union: towards a Fire Framework Directive, *Forest Policy and Economics*, 29: 1-6.

Aguilar, S., Montiel, C. (2011) The challenge of applying governace and sustainable development to wildland fire management in Southern Europe, *Journal of Forestry Research*, 22(4): 627-639.

Montiel, C., Herrero, G. (2010) Overview of policies and practices related to fire ignitions, in Sande Silva, J., Rego, F. Fernandes, P., Rigolot, E. (ed.) *Towards Integrated Fire Management- Outcomes of the European Project Fire Paradox*, European Forest Institute, Joensuu, pp. 35-46.

Lazaro, A., Montiel C. (2010) Overview of policies and practices related to fire ignitions", Sande Silva J., Rego F., Fernandes P., Rigolot E. (ed.) *Towards Integrated Fire Management- Outcomes of the European Project Fire Paradox*, EFI, Joensuu, pp. 137-150.

Schuck, A., Kraus, D., Rego, F., Montiel, C., Caastellnou, M. (2010) Reduzierung von Waldbrandgefahren durch Integratives Feuermanagement, *AFZ-DerWald*, 9:4-5.

Agnoletti, M., Anderson, S., Johann, E., Kulvik, M., Kushlin, A., Mayer, P., Montiel, C., Parrotta, J., Rotherham, I., Saratsi, E. (2009) The introduction of historical and cultural values in the sustainable management of European forests, *Global Environment*, 2:172-199.

Montiel, C., San-Miguel, J (2009) Policy analysis reveals the need for new approaches, in Birot, Y (ed.): *Living with Wildfires: What Science can tell us?*, EFI Discussion Paper 15: 63-67. 3

Montiel C. (2007) Cultural heritage, sustainable forest management and property in inland Spain, *Forest Ecology and Management*, 249/1-2: 80-90.

Montiel, C. (2006) The restoration of forest landscapes through farmland afforestation measures in Spain, in Agnoletti, M. (Ed.): *The conservation of cultural landscapes*, CABI Publishing, International,

Nosworthy Way, Wallingford, Oxon, UK, pp. 197-210

Montiel C. (2005) Los montes de socios: un problema territorial de difícil gestión, *Boletín de la Asociación de Geógrafos Españoles*, 40: 181-200.

Montiel C., Galiana L. (2005) Forest policy and land planning policy in Spain: a regional approach. *Forest Policy and Economics*. 7-2: 131 - 142.

Dominguez, G., Montiel, C. (2004) Spain: the reform of national forest policy, in Humphreys, D. (ed.) *Forests for the future: National Forest Programmes in Europe*. Luxembourg: Office for Official Publications of the European Communities.

RECENT INVITED PRESENTATIONS, KEY-NOTES AND LECTURES:

"Traditional fire use in Australia and Europe: a comparison", Conference "Talking fire: reviving indigenous burning in a changed landscape", Newstead (Australia), November 30, 2018

"Fire to prevent and combat wildfire in Europe", Public Lecture, RMIT University (Melbourne, Australia), November 12, 2018

"Fire scenarios in the Central Mountains Range (Spain): a multi-scale concept for integrated fire management in the context of global change", Conference on Fire Prediction Across Scales, Columbia University-New York, October 23-25, 2017

"Community management: the origin and evolution of communal woodlands in Spain", 8th Forest National Conference, Viana do Castelo (Portugal), October 11-14, 2017

"Reconstruction of forest fire scenarios in the inner regions of the Iberian Peninsula through the geohistorical sources, 18th-20th centuries", IUFRO 125th Anniversary Congress, Freiburg (Germany), September 17-22, 2017

"Historical forest fires and floods footprint in the Mediterranean landscapes", International Symposium on Society and Resource Management (ISSRM), Umeå (Sweden), June 19-22, 2017

"The complex interaction of land use changes and fire regime in the Central Mountains Range region (Spain), World Conference on Natural Resource Modelling. Barcelona, June 6-9, 2017

"Fire scenarios: a new concept for fire management at the landscape level", 14th International Wildland Fire Summit. Barcelona, January 31, 2017

"To fire regime to wildfire regime and vice-versa", International Conference on Prescribed Fires, Barcelona, February 1-3, 2017

"Reconstruction of forest fire records in the inner regions of Spain since the 16th century from the geohistorical sources", Mediterranean Fires: Global and Local Challenges. International Workshop hosted by FAO, Roma (Italy), December 13, 2016

Historical Geography of wildfires in Spain: old and new risk prone areas. Europe, what's next? Changing geographies and geographies of change, 4rd Congress of EUGEO, the Association of European Geographical Societies. Roma, September 5-7, 2013

"Best practices of fire use as a management tool in Europe: selected regional case studies", EUGEO 2011 Geography's Stake in Europe: People, Environment, Politics, 3rd Congress of EUGEO, the Association of European Geographical Societies. London, August 29-30, 2011

"Fire use practices and regulations in Europe: towards a Fire Framework Directive", 5th International Wildland Fire Conference, South Africa, May 9-13, 2011

"Landscape changes and wildfire behaviour: new fire scenarios in Spain". IUFRO Landscape Ecology Working Group International Conference: Forest Landscapes and Global Change, Bragança (Portugal), September 21-27, 2010

"Adapting legislation for promoting integrated fire management in Europe", European Workshop on The Assessment of Forest Fire Risk and Innovative Strategies for Fire Prevention, Rhodes (Greece), May, 4-6, 2010

"Fire use practices and policies in Europe", Fire Paradox Final Conference, Freiburg (Germany), February 25-26, 2010.

"New governance strategies for wildland fire management in Mediterranean countries", International

Symposium on Change in Governance as collective learning process: Management, Politics and Ethics in Forestry, Nancy (France), June 21-24, 2009

"The European Fire Framework Directive proposal and the Italian legislation on the use of fire", Euro-Mediterranean Forum of Fire Users. Bosa (Sardinia, Italy), April 20, 2009

"National policy instruments related to wildfire management and fire use", Forest Fires in the Mediterranean Region: Prevention and Regional Cooperation, International Workshop organised by FAO, Sabaudia (Italy), May 13-15, 2008

"Changes in fire management policies in different European countries", The '88 Fires: Yellowstone and Beyond Conference. Jackson Hole, Wyoming, September 22-27, 2008

"Cultural Heritage, Sustainable Forest Management and Property in Inland Spain", International Conference on Cultural Heritage and Sustainable Forest Management: the role of traditional knowledge. Firenze (Italy), June 8-11, 2006

"Forest policy and land-planning policy links in Spain: a regional approach", Regional Forum Plan Bleue: Forestry Sector and Sustainable Development in the Mediterranean: challenges, policies and governance. Rabat (Morocco), November 24-26, 2005

TEACHING (courses and degree programs at Complutense University of Madrid, last 10 years):

Undergraduate Degree in Geography and Spatial Planning, Department of Geography: "Territorial Development"; "Spatial Planning", video containing a class of 2017-18 academic year: https://www.youtube.com/watch?v=vWK9RshEiBU&feature=youtu.be; "Geography of Spain", videos containing 3 classes of 2017-18 academic year:

https://www.youtube.com/watch?v=d4aYxVK6wAI&feature=youtu.be https://www.youtube.com/watch?v=YSk21N5HAcs&feature=youtu.be https://www.youtube.com/watch?v=0I9VPo286RE&feature=voutu.be

Master's Degree in Territorial Dynamics and Development, Department of Geography: "Territorial dynamics analysis, theories and development models", "Territorial dynamics and development in Spain and in the European Union", "Global change and natural hazards"

Master's Degree in Tourism Management and Planning, Faculty of Commerce and Tourism: "Nature tourism management and development"

Doctoral School of Geography: "Forest Geography"

MEDIA AND OUTREACH:

Eavesdrop on Experts interview, University of Melbourne (Australia): "Learning to live with fire", December 19, 2018: https://pursuit.unimelb.edu.au/podcasts/learning-to-live-with-fire

Interview, Tribuna Complutense, November 16, 2016: http://tribuna.ucm.es/184/art2492.php#.WifKUeRe42x

Spanish Television documentary RTVE2, "The fire footprint", November 28, 2016: http://www.rtve.es/television/20161123/huella-del-fuego/1446443.shtml

Spanish Radio interviews RNE5: "Wildfires: beyond guilt", October 20, 2017: http://www.rtve.es/m/alacarta/audios/derecho-para-todos/derecho-para-todos-incendios-forestales-masalla-culpa-20-10-17/4263490/?media=rne

"Forest Fire Decalogue", July 12, 2017: http://www.rtve.es/alacarta/audios/por-todo-lo-alto/todo-altodecalogo-del-fuego-fundacion-pau-costa-12-07-17/4111692/

Public lecture on "Reconstruction of the historical record of fire in the interior and Mediterranean regions of the Iberian Peninsula", May 5, 2018: https://www.youtube.com/watch?y=FuHGuEIDsqw