

IRENE MARTÍN-FORÉS, Curriculum Vitae, 2019



Personal details:

D.O.B: 28/06/1985

Address: Spanish National Research Council – National Museum of Natural Sciences (MNCN-CSIC).

Department of Biogeography and Global Change. C/ Serrano 115 dpdo, 8th stage, office 803. E-28006 Madrid, Spain

Email: imfores@pdi.ucm.es, imfores@mncn.csic.es

Phone: (+34)651088993

Brief summary

I received a competitive 4-years scholarship to undertake my PhD from October 2010 to February 2015 at the Complutense University of Madrid. Afterwards, I was awarded a 6-months postdoctoral grant at the King Juan Carlos University. Currently, I am holding a postdoctoral position at the Spanish National Research Council (CSIC), specifically at the National Museum of Natural Sciences within Fernando Valladares' lab. The multidisciplinary experiences over my research career have allowed me to develop expertise in diversity of fields, including biological invasions, biogeography and biodiversity patterns, plant community ecology, functional ecology and Mediterranean-type ecosystems anthropically impacted by global change. I have already had the chance to work in a variety of different scientific teams, and my experiences have always been rewarding both personally and professionally.

Published books and book chapters:

2. Ovalle, C., Casado, M.A., Acosta-Gallo, B., Castro, I., Del Pozo, A., Barahona V., Sánchez-Jardón, L., de Miguel, J.M., Aravena, T., **Martín-Forés, I.** (2015) El espinal de la Región Mediterránea de Chile. Colección libros INIA nº 34, 206pp, Chile. ISBN: 978-956-7016-46-4.
1. **Martín-Forés, I.** (2017) Exotic Plant Species in the Mediterranean Biome: A Reflection of Cultural and Historical Relationships. In: Fuerst-Bjeliš B (Ed.). Mediterranean Identities - Environment, Society, Culture. InTech Open, 414pp, Croatia. ISBN: 978-953-51-3586-9.

Peer-reviewed Scientific Publications:

Manuscripts in preparation

- Martín-Forés, I.,** Bravo-Oviedo, A., Magro, S., Valladares, F. (in prep) Changes in nature's contributions to people associated with spontaneous forest expansion and densification in temperate Europe. To be submitted to Journal of Applied Ecology.
- Martín-Forés, I.,** Bastías, CC., de la Cruz, M., Acuña Míguez, B. Valladares, F. (in prep) Facilitation plays a differential role in recruitment patterns along a forest expansion gradient. To be submitted to Journal of Ecology.
- Villellas, J., **Martín-Forés, I.,** Mariette, S., Guichoux, E., Acuña Míguez, B., Hampe, A., Valladares, F. (in prep) Functional divergence is not determined by genetic distance along the expansion gradient of a Mediterranean tree. To be submitted to Annals of Forest Science
- Guerrieri, R., **Martín-Forés, I.,** Espelta, JM. (in prep) Land-use legacies influence forest functioning: recently and long-established beech forests differ in tree water-use efficiency and nutrient availability. To be submitted to Annals of Forest Science
- Acuña Míguez, B. Valladares, F., **Martín-Forés, I.** (in prep) Water use efficiency along a forest expansion gradient is explained by increasing environmental severity and not by intraspecific competition. To be submitted to Oecologia

Published manuscripts

14. Guerin, G.R., **Martín-Forés, I.**, Munroe, S.E.M., Sparrow, B., Lowe, A.J. Non-native plant richness and abundance alter the growth form spectrum of native grasslands. Submitted to *Applied Vegetation Science* in 2019.
13. Valladares, F., Magro, S., **Martín-Forés, I.** (*in press*). Anthropocene, the challenge for *Homo sapiens* to set its own limits. *Cuadernos de Investigación Geográfica*, doi: <http://dx.doi.org/10.18172/cig.3681>.
- 12. Martín-Forés, I.**, Casado, M.A., Castro, I., del Pozo, A., Molina-Montenegro, M.A., de Miguel, J.M., Acosta-Gallo, B. (2018) Variation in phenology and overall performance traits can help to explain the plant invasion process amongst Mediterranean ecosystems. *Neobiota* 41, 67-89.
11. Casado, M.A., **Martín-Forés, I.**, Castro, I., De Miguel, J.M., Acosta-Gallo, B. (2018). Asymmetric flows and drivers of herbaceous plant invasion success among Mediterranean-climate regions. *Scientific Reports* 8, 16834.
10. **Martín-Forés, I.**, Acosta-Gallo, B., Castro, I., de Miguel, J. M., del Pozo, A., Casado, M. A. (2018) The invasiveness of *Hypochaeris glabra* (Asteraceae): Responses in morphological and reproductive traits for exotic populations. *PLoS one* 13, e0198849.
9. Guerin, G.R., **Martín-Forés, I.**, Sparrow, B., Lowe, A.J. (2018) The biodiversity impacts of non-native species should not be extrapolated from biased single-species studies. *Biodiversity and Conservation* 27, 785–790.
8. Baruch, Z., Jones, A.R., Hill, K.E., McInerney, F.A., Blyth, C., Caddy-Retalic, S., Christmas, M.C., Gellie, N.J.C., Lowe, A.J., **Martín-Forés, I.**, Nielson, K.E., Breed, M.F. (2018) Functional acclimation across microgeographic scales in *Dodonaea viscosa*. *AoB PLANTS* 10, ply029.
7. **Martín-Forés, I.**, Guerin, G.R., Lowe, A.J. (2017) Weed abundance is positively correlated with native plant diversity in grasslands of southern Australia. *PLoS one* 12, e0178681.
6. **Martín-Forés, I.**, Avilés, M., Acosta-Gallo, B., Breed, M.F., Del Pozo, A., De Miguel, J.M., Sánchez-Jardón, L., Castro, I., Ovalle, C., Casado, M.A. (2017) Ecotypic differentiation and phenotypic plasticity combine to enhance the invasiveness of the most widespread daisy in Chile, *Leontodon saxatilis*. *Scientific Reports* 7, 1546.
5. De Miguel, J.M., **Martín-Forés, I.**, Acosta-Gallo, B., Del Pozo, A., Ovalle, C., Sánchez-Jardón, L., Castro, I., Casado, M.A. (2016) Non-random co-occurrence of native and non-native plant species in Mediterranean pastures. *Acta Oecologica* 77, 18–26.
4. **Martín-Forés, I.**, Castro, I., Acosta-Gallo, B., Del Pozo, A., Sánchez-Jardón, L., De Miguel, J.M., Ovalle, C., Casado, M.A. (2016) Alien plant species coexist over time with native ones in Chilean Mediterranean grasslands. *Journal of Plant Ecology* 9, 682–691.
3. Casado M.A., Acosta-Gallo, B., Sánchez-Jardón, L., **Martín-Forés, I.**, Castro, I., Ovalle, C., Del Pozo, A., De Miguel, J.M. (2015) Interactive effects of source and recipient habitats on plant invasions: distribution of exotic species in Chile. *Diversity and Distributions* 21, 609–619.
2. **Martín-Forés, I.**, Sánchez-Jardón, L., Acosta-Gallo, B., Del Pozo, A., Castro, I. de Miguel, J.M., Ovalle, C., Casado, M.A. (2015) From Spain to Chile: Environmental filters and success of herbaceous species in Mediterranean-climate regions. *Biological Invasions* 17, 1425–1438.
1. Guerin, G.R., **Martín-Forés, I.**, Biffin, E., Baruch, Z., Breed, M.F., Christmas, M.J., Cross, H.B. & Lowe, A.J. (2014) Global change community ecology beyond species sorting: a quantitative framework based on Mediterranean Biome examples. *Global Ecology and Biogeography* 23, 1062–1072.

Peer-reviewed Articles in non-indexed journals:

3. **Martín-Forés, I.**, Martín-López, B., Montes, C. (2013) Anthropomorphic factors influencing Spanish conservation policies of vertebrates. *International Journal of Biodiversity* 2013, 9 pp.
2. **Martín-Forés, I.**, Casado, M.A., Castro, I., Ovalle, C., Del Pozo, A., Acosta-Gallo, B., Sánchez-Jardón, L., De Miguel, J.M. (2012) Flora of the Mediterranean Basin in Chilean spinals: Evidences of a colonization. *Pastos* 42 - Special issue: Grazing Systems and Biodiversity in Iberoamerica, 137–160.
1. Martín-López, B., **Martín-Forés, I.**, González, J.A., Montes C. (2011) La conservación de biodiversidad en España: atención científica, construcción social e interés político. *Revista Ecosistemas* 20, 104–113.

Journal referee:

Referee for different high-impact journals, including to date: *Journal of Applied Ecology*, *PLoS One*, *Conservation Biology*, *Restoration Ecology*, *Acta Oecologica*, *Journal of Mountain Sciences*, *Peer J*.

Conference presentations and abstracts:

15. **Martín-Forés I.**, Bastías CC., Magro S., Acuña Miguez B., de la Cruz M., Álvarez P., Valladares F. (2019) Sex ratios or density-dependency: What drives *Juniperus thurifera* recruitment during forest expansion?. *Sibecol 2019. 1st meeting of the Iberian Ecological Society & XIV AEET meeting*. 4-7 February. Barcelona, Spain.
14. Acuña Miguez B., **Martín-Forés I.**, Valladares F. (2019) Stresses and strategies: Water use efficiency in *Juniperus thurifera* individuals along a gradient of forest expansion. *Sibecol 2019. 1st meeting of the Iberian Ecological Society & XIV AEET meeting*. 4-7 February. Barcelona, Spain.
13. **Martín-Forés I.**, Acosta-Gallo B., Guerin G.R., Lowe A.J., Castro I., de Miguel J.M., Casado M.A. (2018) Defying a traditional assumption: Non-native plants species seem to have positive effects on native biodiversity in grasslands located in several Mediterranean-climate regions. *Neobiota 2018. 10th International Conference on Biological Invasions: New Directions in Invasion Biology*. 3-7 September. Dun Laoghaire, Dublin, Ireland. **Best oral presentation award.**
12. Casado M.A., **Martín-Forés I.**, Castro I., de Miguel J.M., Acosta-Gallo B. (2018) Worldwide asymmetry in plant species flows in the Mediterranean Biome. *Neobiota 2018. 10th International Conference on Biological Invasions: New Directions in Invasion Biology*. 3-7 September. Dun Laoghaire, Dublin, Ireland.
11. **Martín-Fores, I.**, Castro, I., Acosta Gallo, B., Del Pozo, A., Avilés, M., Sánchez Jardón, L., De Miguel, JM., Ovalle, C., Casado, MA. (2016) Tiempo de convivencia. Relaciones entre las especies exóticas y las nativas en los pastizales mediterráneos de Chile. *Congreso Remedial 2016 - Restauración y conservación de los ecosistemas mediterráneos: Respuesta frente al cambio global*. Madrid, Spain.
10. Sánchez Jardón, L., Del Pozo, A., Acosta Gallo, B., **Martín-Forés, I.**, Casado, M.A, Ovalle, C., De Miguel, J.M. (2016) Native herbs diversity in novel silvopastoral systems from Chilean Patagonia. *World Congress Silvo-Pastoral Systems*. 27-30 September. Évora, Portugal.
9. **Martín-Fores, I.**, Del Pozo, A., Avilés, M., Acosta Gallo, B., Sánchez Jardón, L., Ovalle, C., De Miguel, JM., Castro, I., Casado, MA. (2015) Variabilidad vs plasticidad fenotípicas: artes de colonización de tres especies herbáceas mediterráneas en Chile. *V Congreso Nacional de Biodiversidad*. La Orotava, Tenerife, Spain.
8. Avilés, M., Acosta Gallo, B., **Martín-Fores, I.**, Castro, I., Sánchez Jardón, L., De Miguel, J.M., Del Pozo, A., Ovalle, C., Casado, M.A. (2014) Phenotypic plasticity of Spanish and Chilean populations of *Leontodon taraxacoides* (Vill.) Mérat. *Medecos XIII International Conference*. Olmué, Chile.
7. Montalvo Rodríguez, J., Fernández Ulloa, A., Durán Amores, A., Lanaja del Busto, J.M., Sánchez Jardón, L., Acosta Gallo, B., **Martín-Fores, I.**, Herrero de Jáuregui, C. (2013) Inventario exhaustivo de carbono en pinares de Coca (Segovia) mediante datos LiDAR. *6º Congreso Nacional Forestal*. Vitoria-Gasteiz, Spain.
6. **Martín-Forés, I.**, Castro, I., Ovalle, C., Del Pozo, A., De Miguel, J.M., Sánchez-Jardón, L., Acosta-Gallo, B., Casado, M.A. (2012) Old field succession in Mediterranean grasslands of central Chile: the role of alien species. *NEOBIOTA 2012. 7th European Conference on Biological Invasions*. Pontevedra, Spain.
5. Sánchez-Jardón, L., Del Pozo, A., **Martín-Forés, I.**, Acosta-Gallo, B., Casado, M.A. Ovalle, C., De Miguel, J.M. (2012) Native herbs early response to grazing abandonment in NW Patagonia. *NEOBIOTA 2012. 7th European Conference on Biological Invasions*. Pontevedra, Spain.
4. Montalvo, J., Acosta-Gallo, B., Herrero-Jaúregui, C., Sánchez-Jardón, L., **Martín-Forés, I.**, Casado, MA., Pineda, FD. (2011) Soil carbon stocks and climate change mitigation potential of grassland ecosystems in Spain. *GEO-Carbon Conference: Carbon in a Changing World*. Roma, Italy.
3. **Martín-Forés, I.**, Del Pozo, A., Ovalle, C., Sánchez-Jardón, L., Acosta-Gallo, B., Castro, I., De Miguel, J.M., Casado, M.A. (2011) Environmental control on exotic herbaceous species in central Chile. *12th European Ecological Federation Congress*. Ávila, Spain.

2. Montalvo, J., Acosta-Gallo, B., Herrero-Jaúregui, C., Sánchez-Jardón, L., **Martín-Forés, I.**, Casado, M.A., Pineda, F.D. (2011) Soil carbon stocks and climate change mitigation potential of grassland ecosystems in Spain. *12th European Ecological Federation Congress*. Ávila, Spain.
1. **Martín-Forés, I.**, Martín-López, B. Montes, C. (2011) Factores antropomórficos que influyen en las políticas de conservación de vertebrados en España. *III Congreso Nacional de Biodiversidad*. Granada, Spain.

Other workshops and panel presentations:

8. **Martín-Forés, I. et al.** (2019) "Sex ratios or density-dependency: What drives *Juniperus thurifera* recruitment during forest expansion?" (2019) Oral presentation. III Jornadas de difusión científica del Museo Nacional de Ciencias Naturales. Ámbito Nacional. MNCN-CSIC, Madrid, Spain
7. **Martín-Forés, I. et al.** (2019) "Defying our traditional view of weeds" (2019) Invited presentation. School of Biological Sciences. The University of Adelaide. Adelaide, Australia.
6. **Martín-Forés, I. et al.** (2018) Workshop organisation. "¡Plántate!: Todo lo que necesitas saber sobre el mundo de las plantas". (2018). Taller dirigido a grupos escolares de entre 5 y 8 años impartido durante la semana de la Ciencia y la Tecnología del CSIC. Ambito Nacional. Museo Nacional de Ciencias Naturales (MNCN-CSIC). Madrid, Spain
5. **Martín-Forés, I. et al.** (2018). Invited presentation. Biogeografía y Cambio Global. MNCN-CSIC. Madrid, Spain
4. **Martín-Forés, I. et al.** (2018). Invited presentation. EBD-CSIC, Estación Biológica de Doñana-Spanish National Research Council, Sevilla, Madrid.
3. **Martín-Forés, I.** (2015) Relationships between native and non-native plant species in Mediterranean grasslands of central Chile and South Australia. International conference. School of Biological Sciences. The University of Adelaide.
2. **Martín-Forés, I. et al.** (2012) Mesa redonda: Investigación científica: lecho de rosas o camino de espinas. Residencia de Estudiantes, Madrid, Spain.
1. **Martín-Forés, I. et al.** (2011) Encuentro con jóvenes investigadores en España. Residencia de Estudiantes, Madrid, Spain.

Grants:

Awarded:

4. The Spanish Ministry of Education and Science (2012-2014) – Predoctoral contract (Formación de Personal Universitario - FPU).
3. The Government of Aragon (2011-2012) – Accommodation and allowance grant at the "Residencia de Estudiantes" for outstanding researchers.
2. The Spanish Ministry of Education and Science (2010-2012) – Predoctoral grant (Formación de Personal Universitario - FPU).
1. The Spanish Ministry of Education and Science (2007-2008) – Grant to collaborate within the Department of ecology at the Complutense University of Madrid.

Teaching, supervision and mentoring

- (2019) Awarded the position 20190621-240 as an Associated professor at the Autonomous University of Madrid.
- (2018-2019) Supervisor of Master student, Belén Acuña Miguez, during her internship program and her Master Thesis entitled "El estrés hídrico en gradientes de colonización de *Juniperus thurifera* L.: Competencia intraespecífica vs. competencia interespecífica" (150 hours of internship; 600 hours of Master Thesis supervision).
- (2017-2018) Supervisor of a Master student, Eduardo Serna Arenas, during his internship program and his Master Thesis entitled "Almacenamiento de carbono en bosques de *Juniperus thurifera* asociado a la restauración pasiva y su importancia en la mitigación del cambio climático". The National Museum of Natural Sciences – Spanish National Research Council (150 hours of Master Thesis supervision; 225 hours of internship)

- (2017-2018) Supervisor of Master student, Miguel Díaz Carro, in his internship program at the National Museum of Natural Sciences – Spanish National Research Council (225 hours of internship)
- (2017-2018) Supervisor of a Master student, Pablo Álvarez García, in his internship program and during his Master Thesis entitled “Efecto de filtros ambientales e históricos en el proceso de regeneración natural de *Juniperus thurifera* en suelos agrícolas abandonados del Parque Natural de Alto Tajo”. The National Museum of Natural Sciences – Spanish National Research Council (150 hours of Master Thesis supervision; 225 hours of internship).
- (2016-2017) Co-supervisor of an undergraduate student, María Bello, during her final degree Project Complutense University of Madrid (150 hours)
- (2016-2017) "Innovation-Teaching" project of teaching innovation: Internationalization of educational resources of the subject of Ecology and adaptation to the European Higher Education Area (EHEA) Complutense University of Madrid
- Honorary collaborator (2016-2017) Complutense University of Madrid. 24 hours. Subjects: Ecology (8 hours), Description and environmental assessment of the territory (8 hours), Sustainable management of the environment (8 hours)
- Hired predoctoral researcher (2013-2014) Complutense University of Madrid. 58 hours. Subjects: Ecology (30 hours), Ecology of the natural resources (5 hours), Final Degree project (23 hours).
- Hired predoctoral researcher (2012-2013) Complutense University of Madrid. 60 hours. Subjects: Ecology of the natural resources (15 hours), Experimental Biology of organisms and systems (12 hours), Applied Experimental Biology (5 hours), Physical planning and environmental impact assessment (8 hours), Descriptive of Ecosystems (20 hours).
- Honorary collaborator (2011-2012) Complutense University of Madrid. 30 hours. Subject: Ecology of the natural resources.

Employment history:

- **The National Museum of Natural Sciences – Spanish National Research Council. Madrid, Spain.** 21/6/2017 – currently. **Postdoctoral Fellow.** Prof. Fernando Valladares laboratory group. Department of Biogeography and Global Change.
- **King Juan Carlos University. Móstoles, Madrid, Spain.** 01/4/2016 – 30/9/2016. **Postdoctoral Fellow.** Prof. Adrián Escudero laboratory group.
- **Complutense University of Madrid.** 01/10/2010 – 31/10/2014. **PhD student researcher hired by the University.**
- **Other employees:**
 - Anaku Naturaleza y Ocio, S.L.L. (2009)
 - Asociación Cultural y Medioambiental Permacultura Cantabria (2016-2017))
 - Self-employed working for Tragsatec and for the MNCN-CSIC (November 2015 and April 2017)

Research stays:

6. Post-Doctoral research stay (06/2018-09/2018). Name of the Project: Unraveling the potential of spontaneous forest establishment for improving ecosystem functions and services in dynamic landscapes (SPONFOREST). Institution: Instituto Nacional de Investigación Agronómica (INRA). Place: Pierroton, Cestas Cedex, France. Duration: 3 months.
5. Post-Doctoral research stay (12/2015-02/2016). In association with the Australian Transect Network; Project: influence of invasive species on native plant diversity in remnant grasslands of South Australia. Institution: The University of Adelaide. Place: Adelaide, Australia. Duration: 2 months.
4. Research stay during PhD (11/2012-02/2013). Name of the Project: Naturalización transcontinental de especies herbáceas en pastizales mediterráneos españoles y chilenos. Institution: The University of Adelaide. Place: Adelaide, Australia. Duration: 3 months.
3. Research stay during PhD (11/2012-02/2013). Name of the Project: TREND. Transect for Environmental Monitoring and Decision Making. Institution: The University of Adelaide. Place: Adelaide, Australia. Duration: 3 months.

2. Research stay during PhD (10/2011-02/2012). Name of the Project: Naturalización transcontinental de especies herbáceas en pastizales mediterráneos españoles y chilenos. Institution: Universidad de Talca. Place: Talca, Chile. Duration: 4 months.
1. Undergraduate research stay (07/2007-08/2007). Name of the Project: Cultivando salud. Institution: GESER (Grupo de Estudios Sobre Ecología Regional) de Argentina. Place: Ibarreta, Formosa, Argentina. Duration: 1 month.

Education history:

- Ph.D. in Biological Sciences**, Complutense University of Madrid (conferred October 2015). Thesis: "Transcontinental naturalization of herbaceous species in Spanish and Chilean Mediterranean grasslands". Supervisors: Miguel Ángel Casado González and Belén Acosta Gallo.
- Advanced Studies Diploma**: Ecology and Environment. Complutense University of Madrid (conferred September 2009)
- Undergraduate: B.Sc. Hons (1st Class)** Biological Sciences, specialized in Ecology and Environment. Complutense University of Madrid (conferred September 2008).
- Undergraduate: B.Sc. Hons** Economics. Universidad Nacional de Educación a Distancia - UNED (ongoing).

Other qualifications, professional memberships and volunteer work:

- Course Diploma. Geographic Information Systems. ArcGIS 9.2. Learning ArcGIS Desktop. On line ESRI (2008)
- Course Diploma. Geographic Information Systems. ArcGIS 9.2. Introduction to ArcScan for ArcGIS. On line ESRI (2008)
- Course Diploma. Geographic Information Systems. ArcGIS 9.2. Working with Rasters in ArcGIS Desktop. On line ESRI (2008)
- Course Diploma. Geographic Information Systems. ArcGIS 9.2. Georeferencing Rasters in ArcGIS. On line ESRI (2008)
- Course Diploma. Geographic Information Systems. ArcGIS 9.2. Geoprocessing with ArcGIS Desktop. On line ESRI (2008)
- Course Diploma. Geographic Information Systems. ArcGIS 9.2. Learning ArcGIS 3D Analyst. On line ESRI (2008)
- Course Diploma. Economy and Ecology. Andalusia University (2009)
- Intensive course Diploma. English Conversation. Complutense University of Madrid (2009)
- Workshop diploma. Taking the first steps in Ecological research. Complutense University of Madrid (2010)
- Workshop certification. How to get you paper published. Complutense University of Madrid (2010)
- Symposium certificate. LDD mini-symposium: "Long distance dispersal: perspectives and new directions". National Institute for Agricultural Research (2010)
- First Aid Certification
- PADI Rescue Diver certification
- Course Diploma. SPSS for lecturers and researchers. Complutense University of Madrid (2011)
- Course certification. Landscape Genetics. Andalusian Center of the Environment (2012)
- Course certification. Reef Life Survey. Centro de Estudios Avanzados de Blanes (CEAB-CSIC) (2015)
- Reef Life Survey Diver certification (2015)
- Course certification. Permaculture and Rural Agrotourism. Permacultura Cantabria (2016)
- Course certification. Escritura de textos científicos. Museo Nacional de Ciencias Naturales (MNCN-CSIC)(2019)

Other accomplishments

- Selected as IPBES fellow for the thematic assessment on invasive alien species (06/2019)
- Active member of: AEET, SIBECOL, BES and ESA
- Fellowship for top researchers to live at the Residencia de Estudiantes. Gobierno de Aragón (2011-2012)