

CONTACT

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ACADEMIC TRAINING

- 2004 – 2008** **PhD.** Awarded with the **Extraordinary Prize** from the Department of Life Sciences (equivalent to *Summa Cum Laude*; year's best dissertation of the department)
Universidad de Alcalá, Madrid, Spain (Prof. José María Rey Benayas) and **Pyrenean Institute of Ecology-Advanced Research Council of Spain (CSIC)**, Zaragoza, Spain (Prof. Francisco A. Comin).
- 1993 – 2000** **B Eng.** Universidad Politécnica de Madrid, Spain. **Forest Engineering** (6 years program).

RESEARCH POSITIONS

- 2020 –** *Assistant Professor.* Department of Landscape Architecture. Graduate School of Design. Harvard University. Cambridge, USA.
Affiliate Professor. Department of Organismal and Evolutionary Biology. Faculty of Arts and Science. Harvard University, USA.
- 2019 –** *Ikerbasque Associate Researcher (Adjunct).* Basque Centre for Climate Change – BC3. Leioa, Spain.
- 2012 – 2020** Ramon y Cajal Research Fellow. Basque Centre for Climate Change – BC3. Leioa, Spain.
- 2014 – 2019** Ikerbasque Research Fellow. Basque Centre for Climate Change – BC3. Leioa, Spain.
- 2013 – 2014** Research fellow. Centre D'Ecologie Fonctionnelle & Evolutive – CNRS (1 year), Montpellier (France)
- 2012 – 2013** Jasper Ridge Restoration Fellow. Stanford University (1.7 years). Jasper Ridge Biological Preserve.
- 2011** Postdoctoral fellow. University of California, Berkeley (1 year). National Centre for Earth-surface Dynamics Postdoctoral Fellow. PI: Prof. Mary E. Power.
- 2009 – 2010** Postdoctoral fellow. University of California, Berkeley. (2 years). Postdoctoral Fellow. Postdoctoral Mobility Fellowship, Spanish Ministry of Innovation and Science. PI: Prof. Mary E. Power.

PROFESSIONAL POSITIONS

- 2014 –** **Vice-president. Fundación Internacional para la Restauración de Ecosistemas.** Branches in Spain, Chile, and Paraguay

PUBLICATIONS

ARTICLES IN PEER-REVIEWED JOURNALS

46. Alvarado P, Cabero J, **Moreno-Mateos D**, Vizzinie A, Alonso J, Lebeuf R, Siquierh JL, Vidal JM. 2021. Phylogenetic relationships among false truffle genera of Paxillaceae – Alpova, Melanogaster, Nealpova, and Paralpova gen. nov. *Mycologia*. In press.
45. Cortina-Segarra J, García-Sánchez I, Grace M, Andrés P, Baker S, Bullock C, Decler K, Dicks LV, Fisher JL, Frouz J, Klimkowska A, Kyriazopoulos AP, **Moreno-Mateos D**, Rodríguez-González PM, Sarkki S, Ventocilla JL. 2021. Barriers to ecological restoration in Europe: expert perspectives. *Restoration Ecology*. doi: 10.1111/rec.13346.
44. **Moreno-Mateos D**, Alberdi A, Mörrien E, Van der Putten W, Rodríguez-Uña A, Montoya D. 2020. The long-term recovery of ecosystem complexity. *Nature Ecology and Evolution*. 4:676-685.
43. Cabero A, Alvarado P, Alonson J, Salcedo I, **Moreno-Mateos D**. 2019. *Elaphomices lilacinus* sp. nov. (Ascomycota, Eurotiomycetes), a new hypogeous species from Navarre (Spain). *Ascomycete.org* 11:229-232.
42. Rodríguez-Uña A, Hidalgo-Castañeda J, Salcedo I, **Moreno-Mateos D**. 2019. Recuperación de las interacciones entre el haya (*Fagus sylvatica*) y los hongos ectomicorrícicos 140 años después del fin de la actividad minera. *Ecosistemas* 28:61-68.
41. **Moreno-Mateos D**, Rodríguez Uña A. 2019. Restaurando interacciones para recuperar la complejidad y la funcionalidad de los ecosistemas. *Ecosistemas* 28:1-3.
40. Jones HP, Jones PC, Barbier EB, Rey Benayas JM, Holl KD, McCrackin ML, Meli P, Montoya D, **Moreno-Mateos D**. 2018. Restoration and repair of Earth's damaged ecosystems. *Proceedings of the Royal Society of London B: Biological Sciences* 285:20172577. Featured in [Phys.org](#), [Science Daily](#), [Chicago Tribune](#), [Science Newline](#), among others.
39. Gerstner K, **Moreno-Mateos D**, Gurevitch J, Beckmann M, Kambach S, Jones HP, Seppelt R. 2017. Will your paper be used in a meta-analysis? Make the reach of your research broader and longer-lasting. *Methods in Ecology and Evolution* 8:777–784.
38. Meli P, Holl KD, Rey Benayas JM, Jones HP, Jones PC, Montoya D, **Moreno-Mateos D**. 2017. A Global Review of Past Land Use, Climate, and Active vs. Passive Restoration Effects on Forest Recovery. *PLoS ONE* 12:e0171368
37. **Moreno-Mateos D**, Barbier EB, Jones PC, Jones HP, Aronson J, Lopez-Lopez JA, McCrackin ML, Meli P, Montoya D, and Rey Benayas JM. 2017. Anthropogenic ecosystem degradation and the recovery debt. *Nature Communications* 8:14163. Database: *Dryad* Digital Repository. <https://doi.org/10.5061/dryad.t5c97>
36. McCrackin ML, Jones HP, Jones PC, **Moreno-Mateos D**. 2017. Incomplete recovery of lakes and coastal marine ecosystems from eutrophication: A global meta-analysis. *Limnology and Oceanography* 62:507–518.
35. Hudson LW, Newbold T, Contu S,... **Moreno Mateos D**,... Purvis A. 2017. The database of the PREDICTS (Projecting Responses of Ecological Diversity in Changing Terrestrial Systems) project. *Ecology and Evolution*
34. Aronson J, Clewell A, **Moreno Mateos D**. 2016. Ecological restoration and ecological engineering: Complementary or indivisible? *Ecological Engineering* 92:392-395.
33. **Moreno-Mateos D**, Maris V, Bechet A, and Curran M. 2015. The true loss caused by biodiversity offsets. *Biological Conservation* 192:552-559.

32. **Moreno-Mateos D**, Meli P, Aronson J, and Vara, MI. 2015. Ecosystem response to interventions: Lessons from restored and created wetland ecosystems. *Journal of Applied Ecology* 53: 1528–1537. Database: *Dryad* Digital Repository <https://doi.org/10.5061/dryad.71r6q>
31. Aronson J, Murcia C, Kattan GH, **Moreno-Mateos D**, Dixon K, Simberloff D. 2014. The road to confusion is paved with novel ecosystem labels: a reply to Hobbs et al. *Trends in Ecology and Evolution* 29:646-647.
30. Murcia C, Aronson J, Kattan G, **Moreno-Mateos D**, Dixon K, Simberloff D. 2014. A 'critique' to the novel ecosystems concept. *Trends in Ecology and Evolution* 29:548-553. **Top 8 most downloaded paper from the journal website in the first 2 years after publication.**
29. Barbier E, **Moreno-Mateos D**, Rogers AD, Aronson J, Pendleton L, Van Dover CL, Danovaro R, Henry L- A, Morato T, Ardron J. 2014. Protect the deep sea. *Nature* 505:475-477.
28. Donovan B, **Moreno Mateos D**, Osborne J, Bisaccio D. 2014. Revising the Economic Imperative for STEM Education. *PLOS Biology* 12: e1001760.
27. Van Dover C, Aronson J, Pendleton L, Smith S, Arnaud-Haond S, **Moreno-Mateos D**, Barbier E, Billett D, Bowers K, Danovaro R, Edwards A, Kellert S, Morato T, Pollard E, Rogers A, Warner R. 2014. Ecological Restoration in the Deep Sea: Desiderata. *Marine Policy* 44:98-106.
26. **Moreno Mateos D**. 2013. Is Embracing Change Our Best Bet? *Science* 341: 458-459.
25. Abraho R, Causape J, **Moreno-Mateos D**, Comin, F. 2013. Nitrate and salt water contamination associated with the transition of an agrarian basin into an irrigated area. *Water Environment Research* 85:105-112.
24. **Moreno-Mateos D**, Power ME, Comin FA, and Yockteng R. 2012. Structural and functional loss in restored wetland ecosystems. *PLOS Biology* (10)1:e1001247. **Featured in *Nature* 481(7383):8 and *PLOS Biology* 10(1):e1001248. Also, featured in hundreds newspapers and news websites from over 10 countries. Selected examples are: [The New York Times](#), [Los Angeles Times](#), [Mother Jones](#), [Science Daily](#), and [MongaBay](#).**
23. **Moreno-Mateos D**, Rey Benayas JM, Pérez-Camacho L, de la Montana E, and Rebollo S. 2011. Effects of land use type on the nocturnal birds of a Mediterranean agricultural landscape. *Acta Ornithologica* 41: 173-182.
22. Rey Benayas JM, de la Montaña E, Pérez Camacho L, de la Cruz M, **Moreno-Mateos D**, Parejo, J.L., and Suárez Seoane, S. 2010. Inter-annual dynamics and spatial congruence of a nocturnal bird assemblage inhabiting a Mediterranean agricultural mosaic. *Ardeola* 57:303-320.
21. **Moreno-Mateos D** and Comín FA. 2010. Integrating objectives and scales for planning and implementing wetland restoration in agricultural catchments. *Journal of Environmental Management* 91:2087-2095. **Featured on the European Commission's news service *Science for Environment Policy* Special Issue 32:1.**
20. **Moreno-Mateos D**, Mander Ü, Comín FA, and Pedrocchi C. 2010. Optimal Location of Created and Restored Wetlands in Mediterranean Agricultural Catchments. *Water Resources Management* 24:2485-2499.
19. Martín E, **Moreno-Mateos D**, and Pedrocchi C. 2010. Hydrochemical disturbances in Mediterranean streams affected by agricultural intensification. *Environmental Monitoring and Assessment* 167:423-435.
18. **Moreno-Mateos D**, Pedrocchi C, and Comín FA. 2010. Influences of constructed wetlands on water quality in a semi-arid catchment degraded by intensive agricultural use. *Ecological Engineering* 36:631-639.

17. **Moreno-Mateos D**, Comín FA, Causapé J, and Pedrocchi C. 2009. The use of wetlands as buffering systems for nitrate release from irrigated agriculture in a semiarid watershed under land use transformation. *Wetlands* 29:1104-1113.
16. **Moreno-Mateos D**, Pedrocchi C, and Comín FA. 2009. How wetland features influence on the structure of recent bird communities in irrigated agricultural catchments: design and management implications. *Biodiversity and Conservation* 18:811–828.
15. **Moreno-Mateos D**, Pedrocchi C, and Comín FA. 2008. Creation of wetlands for the improvement of saline soils degraded by agricultural uses in semi-arid areas. *Applied soil ecology* 40:57-66.
14. **Moreno-Mateos D**, Mander Ü, Comín FA, Pedrocchi C, and Uuemaa E. 2008. Relationships between landscape patterns, wetland characteristics, and runoff water quality in agricultural catchments. *Journal of Environmental Quality* 37:2170-2180.
13. Comín FA, **Moreno D**, and Pedrocchi C. 2008. Scenarios for the management of aquatic bird communities and wetland restoration after intensive agricultural land use and extensive land use cover changes in semi-arid territories. *Verh. Internat. Verein. Limnol.* 30, Part 4:657-661.
12. Pedrocchi C, **Moreno-Mateos D**, and Cervantes-Vallejos J. 2007. Comunidades nidificantes de aves en pastos supraforestales pirenaicos. Su evolución a los largo del año. *Pirineos* 162:109-124.
11. **Moreno D**, Pedrocchi C, Comin FA, and Cabezas A. 2007. Creating wetlands for the improvement of water quality and landscape restoration in semi-arid zones degraded by intensive agricultural use. *Ecological Engineering* 30:103-111. **Most downloaded article from the journal website (April to June 2007).**
10. Comín FA, Menéndez M, Pedrocchi C, Moreno S, Sorando R, Cabezas A, García M, Rosas V, **Moreno D**, González E, Gallardo B, Herrera JA, and Ciancarelli C. 2005. Wetland Restoration: Integrating Scientific-Technical, Economic, and Social Perspectives. *Ecological Restoration* 23:182-186.

BOOK CHAPTERS

9. **Moreno Mateos D**, Rodríguez Uña A. 2019. Historia de la minería, sus impactos y la recuperación forestal en la finca de Artikutza. In: Artikutza, Historia y Naturaleza. Aranzadi. Pp. XX.
8. **Moreno Mateos D**. 2018. Wetland restoration and creation: An overview. In: Finlayson M, et al. eds. *The Wetlands Book. Vol. I: Structure and Function, Management and Methods*. Springer. Pp. 1965-1975.
7. **Moreno Mateos D**, Palmer MA. 2016. Watershed processes as drivers for aquatic ecosystem restoration. In: Palmer MA, Falk DA, Zedler JB, eds. *Foundations of Restoration Ecology*. 2nd Edition. Island Press. Pp. 395-423. **Most sold textbook on restoration ecology.**
6. Ruhí A, Fairchild GW, Spieles DJ, Becerra-Jurado G, **Moreno-Mateos D**. 2016. Chapter 15. Constructed and restored wetlands. In: Batzer D, Boix D Eds. *Invertebrates in Freshwater Wetlands: An international perspective on their ecology*. Springer. Pp. 525-564.
5. **Moreno Mateos D**, Aronson J. 2015. Pertes écologiques potentielles associées aux actions compensatoires de la restauration écologique. In: Levrel H, Frascaria-Lacoste N, Hay J, Martin G, eds. *Restaurer la nature pour atténuer les impacts du développement*. Quae, Versailles. Pp. 210-215.
4. Aronson J, **Moreno Mateos D**. 2015. Restauration écologique : Présent et futur, surtout à grande échelle. In: Levrel H, Frascaria-Lacoste N, Hay J, Martin G, eds. *Restaurer la nature pour atténuer les impacts du développement*. Quae, Versailles. Pp. 162-169.

PUBLICATIONS IN BROAD AUDIENCE MAGAZINES

3. **Moreno Mateos D.** 2015. Límites de la restauración de humedales. *Investigación y Ciencia* 467:50-57 (Spanish edition of *Scientific American*).
2. **Moreno-Mateos, D.** 2012. Pushing the envelope of ecological restoration and ecosystem creation. *The Scientist*. Available at: <http://www.the-scientist.com/?articles.view/articleNo/33314/title/Opinion--Rescuing-Ecosystems/> Featured in the *Society for Ecological Restoration Newsletter* 26(3-4):6.
1. Perez, L., Rey., J.M., de la Montaña, E., **Moreno-Mateos, D.**, Rebollo, S., and Parejo, J.L. 2011. Las aves nocturnas en el paisaje agroforestal del Campo de Montiel. *Quercus* 306:16-25.

 COMPETITIVE GRANTS AND FELLOWSHIPS AWARDED (TOTAL ~€2.7 MILLION)

2020 – 2022	<i>Understanding the recovery of New England's forest ecosystems after agricultural decline to inform ecosystem restoration and landscape architecture.</i> The William F. Milton Fund (Harvard). \$50,000. Principal Investigator.
2020 – 2022	<i>Estimating the recovery of trees evolutionary potential from Pre-Columbian agriculture to improve tropical forest restoration.</i> Lemann Brazil Research Fund (Harvard). \$141,000. Principal Investigator.
2020 – 2021	<i>Understanding the recovery of New England's forest ecosystems after agricultural decline to inform ecosystem restoration and landscape architecture.</i> Harvard Graduate School of Design Dean's Research Grant. \$10,000.
2019 – 2020	<i>The recovery of ecosystem interactions from Norse impacts in Greenland</i> (MDM-2017-0714) Plan Nacional I+D+i. National Research Agency. 16.000 €. Principal investigator-
2016 – 2019	<i>Estimating recovery time of temperate forests after anthropogenic impacts along a complexity gradient</i> (CGL2015-70452-R) Plan Nacional R+D+i RETOS. National Research Agency. 172,000 €. Principal Investigator.
2014 – 2015	<i>Feedbacks between biodiversity and ecosystem functions and services during the recovery process of restored ecosystems after anthropogenic disturbance.</i> National Socio-ecological Synthesis Centre (SESYNC; USA) – iDiv, UFZ (Germany). Amount: \$80,000. Principal investigator.
2012 – 2013	<i>Mechanisms driving structural and functional loss in restored ecosystems.</i> Stanford University (USA). Amount: \$168,000. Role: Recipient fellow.
2011 – 2014	<i>Creation and restoration of aquatic ecosystems to improve water quality and Biodiversity in agricultural catchments.</i> European Commission. Type: LIFE+ Environment. Amount: €1,850,000. Role: Proposal coordinator.
2009 – 2010	<i>Ministry for Innovation and Science of Spain.</i> Type: Postdoctoral fellowship. Amount: \$60,000. Role: Recipient fellow
2007 – 2008	<i>Diputación Provincial de Huesca (Spain).</i> Type: Research fellowship. Amount: €4,500. Role: Principal Investigator.
2006 – 2008	<i>Spanish Research Council (CSIC) and Gobierno de Aragon.</i> Type: PhD scholarship. Amount: €15,000. Role: Recipient student
2007	<i>Caja de Ahorros de la Inmaculada and Gobierno de Aragón.</i> Type: Research scholarship. Amount: €3,000. Role: Recipient student
2004 – 2006	<i>Spanish Research Council (CSIC).</i> Type: PhD scholarship. Amount: €24,000. Role: Recipient student

SUPERVISION AND TEACHING

Supervision

- 2017 – 2021** *Asun Rodriguez*. PhD student supervisor. Universidad del País Vasco, Spain.
- 2018 – 2019** *Javier Porras*. Master's thesis supervisor. Master on Ecosystem Restoration. Universidad de Alcalá. Spain.
- 2018 – 2019** *Alvaro Moreno*. Master's thesis supervisor. Master on Ecosystem Restoration. Universidad Complutense de Madrid. Spain.
- 2017 – 2018** *Guillermo Asens*. Master's thesis supervisor. Master on Ecosystem Restoration. Universidad de Alcalá. Spain.
- 2017 – 2018** *David Lizaso*. Master's thesis supervisor. Master on Agrobiology. University of the Basque Country. Spain.
- 2017** *Xabier Salgado*. Soft Skills Undergraduate Program. Universidad del País Vasco, Spain.
- 2017 – 2018** *Pablo Rhodes*. Master's thesis supervisor. Master on Ecosystem Restoration. Universidad de Alcalá, Madrid, Spain.
- 2016** *Nadia Darwiche*. PhD Committee member. Universidad de Zaragoza, Spain.
- 2014** *Paula Meli*. PhD Committee member. Universidad de Alcalá de Henares, Spain.
- 2012 – 2013** *Minh Chau Ho*. Honor's thesis supervisor. Stanford University.
- 2010 – 2011** *Maria Isabel Vara Rodriguez*. Master's thesis supervisor. Universidad de Alcalá de Henares, Spain
- 2007** *Almudena Rodriguez Vila*. Degree's thesis supervisor. Universidad de Santiago de Compostela. Escuela Superior de Ingenieros Agronomos.

Teaching

- 2020 -** Lecture: Ecology in Design. Harvard Graduate School of Design
- 2020 -** Seminar: Rewilding Harvard. Harvard Graduate School of Design / Department of History (Faculty of Arts and Science)
- 2020 -** Seminar: Ecosystems Restoration. Harvard Graduate School of Design / Organismal and Evolutionary Biology (Faculty of Arts and Science)
- 2018 – 2019** Universidad de Alcalá (Madrid, Spain). Master on Ecosystem Restoration. Lecturer, class "Processes and references in restoration".
- 2014 – 2018** Universidad el País Vasco (Basque Country, Spain). Environmental Science Degree. Lectures on Introduction to Ecosystem Restoration.
- 2011 – 2017** Fundación Internacional para la Restauración de Ecosistemas (Spain), Instituto Nacional de Ecología y El colegio de la Frontera Sur (México). Diplomado en línea: "Restauración de Ecosistemas y Servicios Ambientales". Four-hour lectures and ~40 student evaluations.
- 2014** Paris Institute of Technology for Life, Food and Environmental Sciences (France). Master: "Environmental management of ecosystems and tropical forests". Master lecturer. 6 hour/year.
- 2012 – 2013** Stanford University. Undergraduate science apprentice program. No. students: 4.
- 2009 – 2012** University of California, Berkeley. Undergraduate science apprentice program. No. students: 5.

SERVICE

Panel member

Section Biodiversity, Earth Science, and Global Change, subsection Biodiversity. Spanish National Research Program for R+D+I, 2016.

Reviewer

National Environmental Research Council Fellowship program NERC (UK, 2014)

National Oceanic and Atmospheric Administration NOAA (Restore act program, 2016)

National Research Program. Section Environmental Sciences, 2021.

International expert groups

IPBES, leading author in the Land degradation and restoration Assessment (2017 – 2018). 2020.

Díaz S, Zafra-Calvo N, Obura D, Verburg P, Chaplin-Kramer R, DeClerck F, De Meester L, Dulloo E, Leadley P, Martín-López B, Purvis A, Shaw R, Visconti P, Bellon M, Broadgate W, Burgess N, Cariño J, Castañeda-Alvarez N, Cavender-Bares J, Fernández-Palacios JM, Garibaldi LA, Hill S, Isbell F, Krug C, Liu J, Mace GM, Maron M, McGowan P, Pereira H, Reyes-García V, Rondinini C, Shannon L, Shin YJ, Snelgrove P, Spehn E, Strassburg B, Subramanian S, Tewksbury J, Watson J, Zanne A, Bruford M, Colli L, Dornelas MA, Bascompte J, Dobrota S, Forest F, Hoban S, Johnson M, Jones S, Jordano P, Kassen R, Khoury C, Laikre L, Maxted N, Miloslavich P, Moersberg H, Moreno-Mateos D, Ogden R, Rocha J, Segelbacher G, Souffreau C, Svenning JC, Vázquez E. 2020. Synthesizing the scientific evidence to inform the development of the post-2020 Global Framework on Biodiversity. Earth Commission Meeting Report to the Convention on Biological Diversity. Subsidiary Body on Scientific, Technical and Technological Advice, Convention on Biological Diversity, CBD/SBSTTA/24/inf/9.

Co-Chair, Eclipse working group “What is hampering the effectiveness of existing approaches that aim to restore biodiversity and ecosystem function and services?” H2020 Project, coordinated by Centre for Ecology and Hydrology, UK (2018 – 2019).

Associate editor

Journal of Applied Ecology, Ecological Restoration, Frontiers in Conservation Science.

Editor

Section J. *Wetland restoration and creation*. Wetland management. In: Finlayson, M. *The Wetlands Book*. Springer, New York.

Editor of the Special Issue on Restoration of Ecosystem Complexity for *Ecosistemas* (journal of the Iberian Society of Ecology).

Scientific committees' member

Annual Meeting Spanish Association of Ecology. Plasencia, Extremadura 2021.

8th World Conference on Ecological Restoration, Cape Town. 2019. Organized by the Society of Ecological Restoration.

IX European Wetlands Congress. Huesca, Spain. 2014. Organized by the Society of Wetland Scientists.