

Updated on 2022-07-13

REY BENAYAS, José María

URL: <https://josemrey.web.uah.es/>, Google Scholar:

<https://scholar.google.es/citations?user=0qX6JtIAAAAJ&hl=es>, Research Gate:

https://www.researchgate.net/profile/Jose_Benayas, ORCID: <https://orcid.org/0000-0002-2099-8512>

PhD in Biology since 1990, Universidad Autónoma de Madrid (Spain), the **Thesis was awarded**.

2019 Research Excellence Award received from the University of Alcalá.

Ranking of the World Scientists: **World's Top 2% Scientists in Years 2020 and 2021** (Ecology)

CURRENT POSITION

Full Professor since 2007, Departamento de Ciencias de la Vida, Edificio de Ciencias, Universidad de Alcalá, 28805 Alcalá de Henares, Spain. Tel. +34 91 8854987, Fax +34 91 8854929, e-mail: josem.rey@uah.es, Twitter @josemreybenayas.

PAST APPOINTMENTS

Position	Institution	Date
FPI Training Researcher (MEC)	Universidad Autónoma de Madrid	I-87 - VIII-90
Fulbright post-doc, Adjunct Lecturer	Northern Illinois University (USA)	IX-90 - VIII-91
Fulbright post-doc, Research Associate	GeoEcoArc Research (USA)	IX-91 - VIII-92
Research Associate	Ciencias Medioambientales, CSIC	X-92 - IX-94
Lecturer	Universidad de Alcalá	II-94 - IX-94
Tenure track	Universidad de Alcalá	X-94 - VI-96
Associate	Universidad de Alcalá	VI-96 - X-07
Invited Researcher	ECOSUR (México)	Since 2003
<i>Ad honorem</i> Professor	UFRO (Chile)	Since 2019

SYNERGISTIC ACTIVITIES

1. Director of the [Master's Program on Ecosystem Restoration](#), coordinated by the Universidad de Alcalá (2005-present).
2. President of the [Fundación Internacional para la Restauración de Ecosistemas](#) (2006-present).
3. Associate Editor of [Bosque](#) (2007-2021).
4. Associate Editor of [Forests](#) (2019-2022).
5. Associate Editor of [Frontiers in Conservation Science - Plant Conservation section](#) (2020-present)
5. Editor-in-Chief of [Ecosistemas](#) (<http://www.revistaecosistemas.net>) (February 2001-September 2004).
6. Chair of the Department of Ecology, Alcalá University (2003-2006), Vice-chair (2006-2008).
7. Member of the Directive Board of the [Spanish Society for Terrestrial Ecology](#) (2002-2006).
8. Coordinator of the PhD Program *Global change and sustainable development*, Universidad de Alcalá (2004-2006).
9. Coordinator of the PhD Program *Ecology. Conservation and restoration of ecosystems*, Universidad de Alcalá de Henares (2006-2010).

RESEARCH

Agroecology, biodiversity conservation, ecological restoration, ecosystem services, forest ecology, plant establishment.

INDICATORS OF MY PUBLICATIONS ACCORDING TO GOOGLE SCHOLAR

Total citations: 14268, h-index = 57. Citations since 01/01/2017: 7791, h-index = 39.

Continuous **positive evaluations of my research by the Spanish Ministry of Science and Education since 1988**, at the start of my academic career (five "sexenios").

MAJOR PEER-REVIEWED PUBLICATIONS

- Bernáldez, F.G.; Rey Benayas, J.M.; Levassor, C. & Peco, B. 1989. Landscape ecology of uncultivated lowlands in Central Spain. *Landscape Ecology* 3:3-18.
- Rey Benayas, J.M.; Bernáldez, F.G.; Levassor, C. & Peco, B. 1990. Vegetation of groundwater discharge sites in the Douro Basin, Central Spain. *J. of Vegetation Science* 1: 461-466.
- Bernáldez, F.G. & Rey Benayas, J.M. 1992. Geochemical relationships between groundwater and wetland soils and their effects on vegetation in Central Spain. *Geoderma* 55: 273-278.
- Bernáldez, F.G.; Rey Benayas, J.M. & Martínez, A. 1993. Ecological impact typology on wetlands produced by groundwater extraction (Douro River, Spain). *J. of Hydrology* 141: 219-238.
- Rey Benayas, J.M. & Scheiner, S.M. 1993. Diversity patterns of wet meadows along geochemical gradients in Central Spain. *J. of Vegetation Science* 4: 103-108.
- Pope, K.O., Rey Benayas, J.M., & Paris, J.F. 1994. Radar remote sensing of forest and wetland ecosystems in the Central American Tropics. *Remote Sensing of the Environment* 48: 205-219.
- Scheiner, S.M. & Rey Benayas, J.M. 1994. Global patterns of plant diversity. *Evolutionary Ecology* 8: 331-338.
- Rey Benayas, J.M. & Pope, K.O. 1995. Landscape ecology and diversity in the seasonal tropics from Landsat TM imagery. *Ecological Applications* 5: 386-394.
- Rejmankova, E., Pope, K.O., Pohl, M., & Rey Benayas, J.M. 1995. Freshwater wetland plant communities of Northern Belize: implications for paleoecological studies of Maya wetland agriculture. *Biotropica* 27: 28-36.
- Rey Benayas, J.M. 1995. Patterns of diversity in the strata of boreal montane forest in British Columbia. *J. of Vegetation Science* 6: 95-98.
- Scheiner, S.M. & Rey Benayas, J.M. 1997. Placing empirical limits on metapopulation models for terrestrial plants. *Evolutionary Ecology* 11: 275-288.
- Barbour, M.G., Fernau, R.F., Rey Benayas, J.M., Jurjovic, N. & Royce, E. 1998. Tree regeneration and early succession following clearcuts in red fir forests of the Sierra Nevada, California. *Forest Ecology & Management* 104: 101-111.
- Fernau, R.F., Rey Benayas, J.M. & Barbour, M.G. 1998. Early secondary succession following clearcuts in red fir forest of the Sierra Nevada, California. *Madroño* 45: 131-136.
- Rey Benayas, J.M. 1998. Growth and mortality in *Quercus ilex* L. seedlings after irrigation and artificial shading in Mediterranean set-aside agricultural lands. *Annales des Sciences Forestières* 55: 801-807.
- Rey Benayas, J.M., Colomer, M.G.S., Levassor, C. & Vázquez-Dodero, I. 1998. The role of wet grasslands in biological conservation in Mediterranean landscapes. In: Joyce, C. & Wade, M. (eds.). *European lowland wet grasslands. Biodiversity, management and restoration*. Pp. 61-72, J. Wiley & Sons, New York, USA
- Rey Benayas, J.M.; Scheiner, S.M.; García S.-Colomer, M., & Levassor, C. 1999. Commonness and rarity: theory and application of a new model to Mediterranean montane grasslands. *Conservation Ecology* 3 (1): 5 (on-line) <http://www.consecol.org/Journal/vol3/iss1/art5/>
- Rey Benayas, J.M.; García S.-Colomer, M., & Levassor, C. 1999. Effects of area, environmental status and environmental variation on species richness per unit area in Mediterranean wetlands. *J. of Vegetation Science* 10: 275-280.
- Gómez Sal, A.; Rey Benayas, J.M.; López Pintor, A., & Rebollo, S. 1999. Role of disturbance in maintaining a savanna-like pattern in Mediterranean *Retama sphaerocarpa* shrubland. *J. of Vegetation Science* 10: 365-370.
- López Pintor, A.; Espigares, T.; Rey Benayas, J.M.; & Gómez Sal, A. 2000. Effect of simulated parent-created microenvironmental conditions on germination of *Retama sphaerocarpa* (L.) Bois. seeds. *J. of Mediterranean Ecology* 1: 219-226.
- Rebollo, S., Pérez, L., García, M.T., Rey Benayas, J. M. & Gómez Sal, A. 2001. Recruitment in a Mediterranean annual plant community: seed bank, emergence, litter, and intra- and interspecific interactions. *Oikos* 95: 485-495.
- Rey Benayas, J.M., López-Pintor, A., García, C., de la Cámara, N., Strasser, R. & Gómez Sal, A. 2002. Early establishment of planted *Retama sphaerocarpa* seedlings under different levels of light, water and weed competition. *Plant Ecology* 159: 201-209.
- Rey Benayas, J.M. & Scheiner, S.M. 2002. Plant diversity, biogeography and environment in Iberia: patterns and possible causal factors. *J. of Vegetation Science* 13: 245-258.
- López-Pintor, A., Espigares, T. & Rey Benayas, J.M. 2003. Spatial segregation of plant species caused by *Retama sphaerocarpa* influence in Mediterranean pasture: a perspective from the soil seed bank. *Plant Ecology* 167: 107-116.
- Rey Benayas, J. M. & de la Montaña, E. 2003. Identifying areas of high-value vertebrate diversity for strengthening conservation. *Biological Conservation* 114: 357-370.
- Rey Benayas, J. M., Espigares, T. & Castro Díez, P. 2003. Effects of herb competition on planted *Quercus faginea* seedlings in Mediterranean cropland. *Applied Vegetation Science* 6: 213-222.
- Rey Benayas, J. M., García Sánchez-Colomer, M. & Escudero, A. 2004. Landscape- and field-scale control of spatial variation of soil properties in Mediterranean montane meadows. *Biogeochemistry* 69: 207-225.
- Rey Benayas, J. M. & Camacho, A. 2004. Performance of *Quercus ilex* saplings planted in abandoned Mediterranean cropland after long term interruption of their management. *Forest Ecology & Management* 194: 223-233.

- Espigares, T., López-Pintor, A. & Rey Benayas, J.M. 2004. Is the interaction between *Retama sphaerocarpa* (L.) Boiss. seedlings and its understorey herbaceous vegetation always reciprocally positive? *Acta Oecologica* 26: 121-128.
- González-Espinosa, M., Rey Benayas, J. M., Ramírez-Marcial, N., Huston, M. & Golicher, D. 2004. Tree diversity in the Northern Neotropics: regional patterns in highly diverse Chiapas, Mexico. *Ecography* 27: 741-756.
- Rey Benayas, J. M., Navarro, J., Espigares, T., Nicolau, J.M. & Zavala, M.A. 2005. Effects of artificial shading and weed mowing in reforestation of Mediterranean abandoned cropland with contrasting *Quercus* species. *Forest Ecology & Management* 212: 302-314.
- Rey Benayas, J.M. 2005. Restoration after land abandonment. In: Mansourian, S., Vallauri, D. & Dudley, N. (eds.). *Forests Restoration in Landscapes: Beyond Planting Trees*. Pp. 356-360. Springer, New York, USA.
- Cayuela, L., Rey Benayas, J.M. & Echeverría, C. 2006. Clearance and fragmentation of tropical montane forests in the Highlands of Chiapas, Mexico (1975-2000). *Forest Ecology & Management* 226: 208-218.
- Cayuela, L., Golicher, D.J., Salas Rey, J. & Rey Benayas, J.M. 2006. Classification of a complex landscape using Dempster-Shafer theory of evidence. *International J. of Remote Sensing* 27: 1951-1971.
- Rey Benayas, J. M., de la Montaña, E., Belliure, J. & Eekhout, X.R. 2006. Identifying areas of high herpetofauna diversity that are threatened by planned infrastructure projects in Spain. *J. of Environmental Management* 79: 279-289.
- Cayuela, L., Golicher, D.J., & Rey Benayas, J.M. 2006. The extent, distribution, and fragmentation of vanishing Montane Cloud Forest in the highlands of Chiapas, Mexico. *Biotropica* 38: 544-554.
- Echeverría, C., Coomes, D., Salas, J., Rey Benayas, J. M., Lara, A. & Newton, A. Rapid deforestation and fragmentation of Chilean temperate forests. *Biological Conservation* 130: 481-494.
- de la Montaña, E., Rey Benayas, J. M & Carrascal, L.M. 2006. Response of bird communities to silvicultural thinning of Mediterranean maquis. *J. of Applied Ecology* 43: 651-659.
- Muñiz, M.A., Williams-Linera, G. & Rey Benayas, J. M. 2006. Distance effect from cloud forest fragments on plant community structure in abandoned pastures in Veracruz, Mexico. *J. of Tropical Ecology* 22: 431-440.
- López-Pintor, A., Gómez Sal, A. & Rey Benayas, J.M. 2006. Shrubs as a source of spatial heterogeneity – the case of *Retama sphaerocarpa* in Mediterranean pastures. *Acta Oecologica* 29: 247-255.
- Cayuela Delgado, L., Rey Benayas, J.M., Justel, A. & Salas, J. 2006. Modelling tree diversity in a highly fragmented tropical montane landscape for conservation prioritization. *Global Ecology & Biogeography* 15: 602-613.
- Cayuela, L., Golicher, D.J., Rey Benayas, J.M., González-Espinosa, M. & Ramírez-Marcial, N. 2006. Synergistic effects of landscape fragmentation and local disturbance on tree diversity in tropical montane forests. *J. of Applied Ecology* 43: 1172-1181.
- Echeverría, C., Lara, A., & Newton, A. Rey Benayas, J. M. & Coomes, D. 2007. Impacts of forest fragmentation on species composition and forest structure in the temperate landscape in southern Chile. *Global Ecology & Biogeography* 16: 423-429.
- Purves, D., Zavala, M.A., Oglel, K., Prieto, F. & Rey Benayas, J.M. 2007. Coupling environmental forcing, metapopulation dynamics, and dispersal of *Quercus* species in central Spain. *Ecological Monographs* 77: 77-97.
- Rey Benayas, J.M., Martins, A., Nicolau, J.M. & Schulz, J. 2007. Abandonment of agricultural land: an overview of drivers and consequences. *Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources*, 2007 2, No. 057, doi: 10.1079/PAVSNNR20072057.
- Rey Benayas, J.M., Fernández, A. & Aubenau, A. 2007. Clipping herbaceous vegetation improves early performance of planted seedlings of the Mediterranean shrub *Quercus coccifera*. *Web Ecology* 7: 120-131.
- Rey Benayas, J.M., Cuesta, B., Villar-Salvador, P. & Jáuregui, P. 2008. Life-history traits in an evergreen Mediterranean oak respond differentially to previous experimental environments. *Web Ecology* 8: 74-83.
- Rey Benayas, J.M., Bullock, J.M. & Newton, A.C. 2008. Creating woodland islets to reconcile ecological restoration, conservation, and agricultural land use. *Frontiers in Ecology and the Environment* 6: 329-336 (DOI: 10.1890/070057).
- Cayuela, L., Rey Benayas, J.M., Maestre, F. & Escudero, A. 2008. Early environments drive diversity and floristic composition in Mediterranean old fields: Insights from a long-term experiment. *Acta Oecologica* 34: 311-321.
- Fonseca, W., Alice, F. & Rey Benayas, J.M. 2009. Modelos para estimar la biomasa de especies nativas en plantaciones y bosques secundarios en la zona Caribe de Costa Rica. *Bosque* 30: 36-47.
- Razola, I. & Rey Benayas, J.M. 2009. Effects of woodland islets introduced in a Mediterranean agricultural landscape on local bird communities. *Web Ecology* 9: 44-53.
- Newton, A. C., L. Cayuela, C. Echeverría, J. J. Armesto, R. F. Del Castillo, D. Golicher, D. Geneletti, M. Gonzalez-Espinosa, A. Huth, F. López-Barrera, L. Malizia, R. Manson, A. Premoli, N. Ramírez-Marcial, J. Rey Benayas, N. Rüger, C. Smith-Ramírez and G. Williams-Linera. 2009. Toward Integrated

- Analysis of Human Impacts on Forest Biodiversity: Lessons from Latin America. *Ecology and Society* 14 (2): 2. [online] URL: <http://www.ecologyandsociety.org/vol14/iss2/art2/>
- Rey Benayas, J.M., Newton, A.C., Díaz, A. & Bullock, J.M. 2009. Enhancement of Biodiversity and Ecosystem Services by Ecological Restoration: a Meta-analysis. *Science* 325: 1121-1124.
- Newton, A.C., Hill, R., Echeverría, C., Golicher, D., Rey Benayas, J.M., Cayuela, L. & Hinsley, S. 2009. Remote sensing and the future of landscape ecology. *Progress in Physical Geography* 33: 528-546.
- Cuesta, B., Villar-Salvador, P., Puértolas, J., Rey Benayas, J.M. & Michalet, R. 2010. Indirect facilitation mediated by herbs increases with aridity in a Mediterranean shrubland. *J. Ecology* 98: 687-696.
- Schulz, J., Cayuela, L., Echeverria, C., Salas, J. & Rey Benayas, J.M. 2010. Land cover dynamics of the dryland forest landscape of Central Chile. *Applied Geography* 30: 436-447.
- Rey Benayas, J.M., Galván, I. & Carrascal, L.M. 2010. Differential effects of vegetation restoration in Mediterranean abandoned cropland by secondary succession and pine plantations on bird assemblages. *Forest Ecology & Management* 260: 87-95.
- Rey Benayas, J.M., Escudero, A., Martín Duque, J.F., Nicolau, J.M., Villar, P., García de Jalón, D. & Balaguer, L. 2010. A multi-institutional Spanish Master in Ecosystem Restoration: vision and four-year experience. *Ecological Restoration* 28: 188-192.
- Cuesta, B., Villar-Salvador, P., Puértolas, J., Jacobs, D.F. & Rey Benayas, J.M. 2010. Why do large, nitrogen rich seedlings better resist stressful transplanting conditions? A physiological analysis in two functionally contrasting Mediterranean forest species. *Forest Ecology & Management* 260: 71-78.
- Altamirano, A., Field, R., Cayuela, L., Aplín, P., Rey-Benayas, J.M. & Lara, A. 2010. Woody species diversity in temperate Andean forests: the need for new conservation strategies. *Biological Conservation* 143: 2080-2091.
- Cuesta, B., Vega, J., Villar-Salvador, P. & Rey Benayas, J.M. 2010. Root growth and interference with shoot elongation in Aleppo pine (*Pinus halepensis* Mill.) seedlings: effects of plant size and nitrogen concentration. *Trees* 24: 899-908.
- Rey Benayas, J.M., de la Montaña, E., Pérez-Camacho, L., De la Cruz, M., Moreno, D., Parejo, J.L., Suárez-Seoane, S. y Galván, I. 2010. Short-term dynamics and spatial pattern of a nocturnal bird assemblage inhabiting a Mediterranean agricultural mosaic. *Ardeola* 57: 303-320.
- Galván, I. & Rey Benayas, J.M. 2011. Bird species in Mediterranean pine plantations exhibit different characteristics to those in natural reforested woodlands. *Oecologia* 166: 305-316.
- Schulz, J., Cayuela, L., Rey Benayas, J.M. & Schröder, B. 2011. Proximate causes of vegetation cover change in Mediterranean Central Chile (1975-2008). *Applied Vegetation Science* 14: 571-582.
- Suzart de Albuquerque, F., Assunção-Albuquerque, M.J., Gálvez-Bravo, L., Cayuela, L., Rueda, M. & Rey-Benayas, J.M. 2011. Identification of critical areas for mammal conservation in the Brazilian Atlantic Forest Biosphere Reserve. *Natureza & Conservação – Brazilian Journal of Nature Conservation* 9: 73-78.
- Van de Wouw, P., Echeverría, C. Rey Benayas, J.M. & Holmgren, M. 2011. Persistent Acacia savannas replace Mediterranean sclerophyllous forests in South America. *Forest Ecology & Management* 262: 1100-1108.
- Fonseca, W., Rey Benayas, J.M. & Alice, F. 2011. Carbon accumulation in the biomass and soil of different aged secondary forests in the humid tropics of Costa Rica. *Forest Ecology & Management* 262: 1400-1408.
- Fonseca, W., Alice, F. & Rey Benayas, J.M. 2011. Carbon accumulation in aboveground and belowground biomass and soil of different age native forest plantations in the humid tropical lowlands of Costa Rica. *New Forests*, DOI 10.1007/s11056-011-9273-9.
- Bullock, J.M., Aronson, J., Newton, A.C., Pywell, R.F. & Rey Benayas, J.M. 2011. Restoration of ecosystem services and biodiversity: conflicts and opportunities. *Trends in Ecology and Evolution* 26: 541-549.
- De la Montaña, E., Rey Benayas, J. M., Razola, I. & Vasques, A. 2011. Conservation planning of vertebrate diversity in a Mediterranean agricultural-dominant landscape. *Biological Conservation* 144:2468-2478.
- Moreno, D., Rey Benayas, J.M., Pérez-Camacho, L., de la Montaña, E., Rebollo, S. & Cayuela, L. 2011. Effects of land use on nocturnal birds in a Mediterranean agricultural landscape. *Acta Ornithologica* 46: 173-182.
- Echeverria, C., Newton, A., Coomes, A., Nahuelhual, L. & Rey-Benayas, J.M. 2012. How landscapes change: integration of spatial patterns and human processes in temperate landscapes of southern Chile. *Applied Geography* 32: 822-831.
- Cuesta, B., Rey Benayas, J.M., Gallardo, A. Villar-Salvador, P. & González-Espinosa, M. 2012. Soil chemical properties in abandoned Mediterranean cropland after succession and oak reforestation. *Acta Oecologica* 38: 48-55.
- Newton, A. C., R.F. del Castillo, C. Echeverría, D. Geneletti, M. González-Espinosa, L. Malizia, A.C. Premoli, J.M. Rey Benayas, C. Smith-Ramírez, & G. Williams-Linera. 2012. Forest landscape restoration in the drylands of Latin America. *Ecology and Society* 17 (1): article 17.
- Villar-Salvador, P., Puértolas, J., Cuesta, B., Peñuelas, J.L., Uscola, M., Heredia-Guerrero, N. & Rey Benayas, J.M. 2012. Increase in size and nitrogen concentration enhances seedling survival in Mediterranean plantations. Insights from an ecophysiological conceptual model of plant survival. *New*

- Forests* (DOI 10.1007/s11056-012-9328-6).
- Rey Benayas, J.M. & Bullock, J.M. 2012. Restoration of biodiversity and ecosystem services on agricultural land. *Ecosystems* 15: 883-889.
- Assunção-Albuquerque, M.J.T., J.M. Rey Benayas, M.A. Rodríguez & F.S Albuquerque. 2012. Geographic patterns of vertebrate diversity and identification of relevant areas for conservation in Europe. *Animal Biodiversity and Conservation* 35.1: 1-11.
- Cayuela Delgado, L., L. Gálvez-Bravo, R. Pérez Pérez, F. S. de Albuquerque, D.J. Golicher, R.A. Zahawi, N. Ramírez-Marcial, C. Garibaldi, R. Field, J.M. Rey Benayas *et al.* 2012. The Tree Biodiversity Network (BIOTREE-NET): Prospects for biodiversity research and conservation in the Neotropics. *Biodiversity & Ecology* 4: 211-224.
- Assunção-Albuquerque, M.J.T., J.M. Rey Benayas, F.S Albuquerque & M.A. Rodríguez. 2012. The geography of high-value biodiversity areas for terrestrial vertebrates in Western Europe and their coverage by protected area networks. *Web Ecology* 12: 65-73.
- Rey Benayas, J.M. 2012. Restauración de campos agrícolas sin competir por el uso de la tierra para aumentar su biodiversidad y servicios ecosistémicos. *Investigación Ambiental. Ciencia y Política Pública* 4: 101-110.
- Meli, P., Martínez-Ramos, M. & Rey Benayas, J.M. 2013. Selecting species for passive and active riparian restoration in Southern Mexico. *Restoration Ecology* 21: 163-165.
- Leverkus, A.B., Castro, J., Puerta-Piñero, C. & Rey Benayas, J.M. 2013. Suitability of the management of habitat complexity, acorn burial depth, and a chemical repellent for post-fire reforestation of oaks. *Ecological Engineering* 53: 15-22.
- Ihaddaden, A., Velázquez, E., Rey Benayas, J.M. & Kadi-Hanifi, H. 2013. Climate and vegetation structure determine plant diversity in *Quercus ilex* woodlands along an aridity and land use gradient in Northern Algeria. *Flora* 208: 268-284.
- Sánchez-Oliver, J., Rey Benayas, J.M. & Carrascal, L.M. 2013. Differential effects of local habitat and landscape characteristics on bird communities in Mediterranean afforestations motivated by the EU Common Agrarian Policy. *European J. Wildlife Research* 60: 135-143.
- Meli, P., Martínez-Ramos, M., Rey Benayas, J.M. & Carabias, J. 2014. Combining ecological, social and technical criteria to select species for forest restoration. *Applied Vegetation Science* (doi 10.1111/avsc.12096).
- Carrascal, L.M., Galván, I. Sánchez-Oliver, J.S. & Rey Benayas, J. M. 2014. Regional distribution patterns predict bird occurrence in Mediterranean cropland afforestations. *Ecological Research* 29: 203-211.
- Meli, P., Rey Benayas, J. M., Balvanera, P. & Martínez-Ramos, M. 2014. Restoration enhances wetland biodiversity and ecosystem service supply, but results are context-dependent. *PLOSOne* 9: e93507.
- Sánchez-Oliver, J., Rey Benayas, J. M. & Carrascal, L. M. 2014. Local habitat and landscape influence high predation of bird nests on afforested Mediterranean cropland. *Acta Oecologica* 58: 35-43.
- Zamorano-Elgueta, C. Cayuela, L., Rey Benayas, J. M., Donoso, P. J. & Hobbs, R. J. 2014. The differential influences of human-induced disturbances on tree regeneration community: a landscape approach. *Ecosphere* 5: art90.
- Barral, P., Rey Benayas, J. M., Meli, P. & Maceira, N. 2015. Quantifying the impacts of ecological restoration on biodiversity and ecosystem services in agroecosystems: a global meta-analysis. *Agriculture, Ecosystems & the Environment* 202: 223-231.
- Sutcliffe, L. M. E. et al. (43 co-authors). 2015. Harnessing the biodiversity value of Central and Eastern European farmland. *Diversity & Distributions* 21: 722-730.
- Zamorano, C., Rey Benayas, J. M., Cayuela, L., Hantson, S. & Armenteras, D. 2015. Native forest replacement by exotic plantations in southern Chile (1985–2011) and partial compensation by natural regeneration. *Forest Ecology & Management* 345: 10-20.
- Meli, P., Rey Benayas, J. M., Martínez-Ramos, M. & Carabias, J. 2015. Effects of grass clearing and soil tilling on establishment of planted tree seedlings in tropical riparian pastures. *New Forests* 46: 507- 525.
- Rey Benayas, J. M., Martínez-Baroja, L., Pérez-Camacho, L., Villar-Salvador, P. & Holl, K. D. 2015. Predation and aridity slow down the spread of 21-year-old planted woodland islets in restored Mediterranean farmland. *New Forests* 46: 841-853.
- Rey Benayas, J. M. & Bullock, J. M. 2015. Vegetation restoration and other actions to enhance wildlife in European agricultural landscapes. In: Pereira HM, Navarro LM (eds.) *Rewilding European Landscapes*, 127-142, Springer International Publishing, Switzerland.
- Jacobs, D. F., Oliet, J. A., Aronson, J., Bolte, A., Bullock, J. M., Donoso, P. J., Landhäuser, S. M., Madsen, P., Peng, S., Rey Benayas, J. M., Weber, J. C. 2015. Restoring forests: What constitutes success in the twenty-first century? *New Forests* 46: 601-614.
- Leverkus, A. B., Gustaffson, L., Rey Benayas, J. M. & Castro, J. 2015. Does post-disturbance salvage logging affect the provision of ecosystem services? A systematic review protocol. *Environmental Evidence* 4: 16 (URL: <http://www.environmentalevidencejournal.org/content/4/1/16/about>).
- Sánchez-Oliver, J., Rey Benayas, J. M. & Carrascal, L. M. 2015. Low effect on open-farmland birds of young afforestations in heterogeneous Mediterranean croplands. *PeerJ*: e1453.
- Rey Benayas, J.M. 2015. Establecimiento de islas forestales y otras actuaciones de revegetación estratégica en paisajes agrícolas como mecanismo de adaptación al cambio climático (Capítulo 57). En: Herrero,

- A. y Zavala, M. A. (eds.). *Los Bosques y la Biodiversidad frente al Cambio Climático: Impactos, Vulnerabilidad y Adaptación en España*. Pp. 605-610, MAGRAMA, Madrid (<https://www.miteco.gob.es/es/cambio-climatico/temas/impactos-vulnerabilidad-y-adaptacion/plan-nacional-adaptacion-cambio-climatico/biodiversidad.aspx>).
- van Vliet, J., N. Magliocca, E. Cook, J. M. Rey Benayas, E. C. Ellis, A. Heinemann, Eric Keys, T. M. Lee, J. Liu, O. Mertz, P. Meyfroidt, M. Moritz, Christopher Poeplau, B. E. Robinson, R. Seppelt, K. C. Seto & P. H. Verburg. 2016. Meta-studies in land use science: current coverage and prospects. *Ambio* 45: 15-28.
- Crouzeilles, R., Curran, M., Ferreira, M. S., Lindenmayer, D. B., Grelle, C. E. V. & Rey Benayas, J. M. 2016. A global meta-analysis on the ecological drivers of forest restoration success. *Nature Communications* 7: article 11666.
- Leverkus, A.B., Rey Benayas, J. M. & Castro, J. 2016. Shifting demographic conflicts across recruitment cohorts in a dynamic post-disturbance landscape. *Ecology* 97: 2628-2639.
- Ferrari, M., Geneletti, D., Cayuela, D., Orsi, F. & Rey Benayas, J. M. 2016. Analysis of bundles and drivers of change of multiple ecosystem services in an Alpine region. *Journal of Environmental Assessment Policy and Management* 18: 1-26.
- Moreno, D., Barbier, E. B., Jones, P. C., Jones, H. P., Aronson, J., McCrackin, M., Meli, P., Montoya, D. & Rey Benayas, J. M. 2017. Anthropogenic ecosystem disturbance and the recovery debt. *Nature Communications* 8: 14163.
- Rey Benayas, J. M., Barral, P. & Meli, P. 2017. Lecciones de cuatro meta-análisis globales sobre la restauración de la biodiversidad y los servicios ecosistémicos. *Ecología Austral* 27:193-198 (ISSN en línea: 0327-5477).
- Meli, P., Holl, K. D., Rey Benayas, J. M., Jones, H.P., Jones, P. C., Montoya, D. & Moreno, D. 2017. A global review of past land-use, climate, and active vs. passive restoration effects on forest recovery. *PLoSOne* 12: e0171368.
- Álvarez, E. [16 co-authors] & Rey Benayas, J. M. 2017. Forest biomass density across large climate gradients in northern South America is related to water availability but not with temperature. *PLoSOne* 12: e0171072.
- Castro, J.; Molina-Morales, M.; Leverkus, A.; Martínez-Baroja, L.; Pérez-Camacho, L.; Villar-Salvador, P.; Rebollo, S.; & Rey Benayas, J.M. 2017. Effective nut dispersal by magpies (*Pica pica* L.) in a Mediterranean agroecosystem. *Oecologia* 84:183-192.
- Meli, P., Ruiz, L., Aguilar, R., Rabasa, A., Rey Benayas, J.M. y Carabias, J. 2017. Bosques ribereños del trópico húmedo de México: un caso de estudio y aspectos críticos para una restauración exitosa. *Madera y Bosques* 23: 181-193.
- Chazdon, R. L. & Rey Benayas, J. M. 2017. Ecological restoration and ecosystem services (chapter 36). In: Allison, S. & Murphy, S. *Routledge Handbook of Ecological and Environmental Restoration*, pp. 522-536.
- Andivia, E., Villar, P., Tovar, L., Rabasa, S. & Rey Benayas, J. M. 2017. Multiscale assessment of woody species recruitment in Mediterranean shrublands: facilitation and beyond. *J. of Vegetation Science* 28: 639-648.
- Rey Benayas, J.M. 2017. Outcomes and perspectives of ecological restoration. *Nodium* 9: 4-7.
- Rey Benayas, J. M., Meltzer, J., de las Heras-Bravo, D. & Cayuela, L. 2017. Potential of pest regulation by insectivorous birds in Mediterranean woody crops. *PLoSOne* 12(9): e0180702.
- Sánchez-Moreno, S., Canoa, M., López-Pérez, A. & Rey Benayas, J. M. 2018. Microfaunal soil food webs in Mediterranean semi-arid agroecosystems. Does organic management improve soil health? *Applied Soil Ecology* 125: 138-147.
- Jones, H. P., Jones, P. C., Barbier, E. B., Blackburn, R. C., Rey Benayas, J. M., Holl, K. D., McCrackin, M., Meli, P., Montoya, D. & Moreno, D. 2018. *Restoration and repair of Earth's damaged ecosystems. Proceedings Royal Society B* 285: 20172577.
- Leverkus, A. B.; Rey Benayas, J. M.; Castro, J.; Boucher, D.; Brewer, S.; Collins, B.; Donato, D.; Fraver, S.; Kishchuk, B. E.; Lee, E.-J.; Lindenmayer, D. B.; Lingua, E.; Macdonald, E.; Marzano, R.; Rhoades, C. C.; Royo, A.; Thorn, S.; Waldron, K.; Wagenbrenner, J. W.; Wohlgemuth, T.; & Gustafsson, L. 2018. Salvage logging effects on regulating and supporting ecosystem services – A systematic map. *Canadian Journal of Forest Research* 48: 983-1000.
- Torres, A., Fernández, N., zu Ermgassen, S., Helmer, W., Revilla, E., Saavedra, D., Perino, A., Mimet, A., Rey-Benayas, J.M., Selva, N., Schepers, F., Svenning, J.C & Pereira, H.M. 2018. Measuring rewilding progress. *Philosophical Transactions of the Royal Society B* 376 (DOI: 10.1098/rstb.2017.0433; <http://rstb.royalsocietypublishing.org/content/373/1761/20170433>).
- Cruz-Alonso, V.; Ruiz-Benito, P.; Villar-Salvador, P.; & Rey Benayas, J. M. 2019. Long-term recovery of multifunctionality in Mediterranean forests depends on restoration strategy and forest type. *J. of Applied Ecology* 56: 745-757 (DOI: 10.1111/1365-2664.13340).
- Rey Benayas, J. M., Altamirano, A., Miranda, A., Catalán, G.P., Prado, M., Lisón, F. & Bullock, J.M. 2019. Landscape restoration in a mixed agricultural-forest catchment: planning a buffer strip and hedgerow

- network in a Chilean biodiversity hotspot. *Ambio* 49: 310-323 (DOI: 10.1007/s13280-019- 01149-2).
- Altamirano, A., Miranda, A., Meli, P., Dehennin, J., Muys, B., Prado, M., Catalán, G.P., Smith-Ramirez, C., Bustamante-Sanchez, M., Lisón, F. & Rey Benayas, J. M. 2019. Spatial congruence among indicators of recovery completeness in a Mediterranean forest landscape: Implications for planning large-scale restoration. *Ecological Indicators* 102: 752-759 (<https://doi.org/10.1016/j.ecolind.2019.03.046>).
- Perino, A., H. M. Pereira, L. M. Navarro, N. Fernández, J. M. Bullock, S. Ceaușu, A. Cortés-Avizanda, R. van Klink, T. Kuemmerle, Â. Lomba, G Pe'er, T. Plieninger, J. M. Rey Benayas, C. Sandom, J. C. Svenning & H. Wheeler. 2019. Rewilding complex ecosystems. *Science* 364: eaav5570 (DOI: 10.1126/science.eaav5570).
- Conrado da Cruz, D., Rey Benayas, J.M., Costa Ferreira, G., Monteiro, A.L. & Schwartz, G. 2019. Evaluation of soil erosion process and conservation practices in the Paragominas-Pa municipality (Brazil). *Geographia Technica* 14: 14-35.
- Jones, H. P., Jones, P. C., Barbier, E. B., Blackburn, R. C., Rey Benayas, J. M., Holl, K. D., McCrackin, M., Meli, P., Montoya, D. & Moreno, D. 2019. We agree with Larkin et al. 2019: restoration is context specific. *Proceedings Royal Society B* 286: 20191179 (<http://doi.org/10.1098/rspb.2019.1179>).
- Rebollo, S., Rey Benayas, J.M. et al. (19 co-authors). 2019. Servicios de la avifauna (high mobile link species) en mosaicos agroforestales: regeneración forestal y regulación de plagas. *Ecosistemas* 28: 32-41.
- Cruz-Alonso, V., Villar-Salvador, P., Ruiz-Benito, P., Ibañez, I. & Rey-Benayas, J. M. 2019. Long-term dynamics of shrub facilitation shape the mixing of evergreen and deciduous oaks in Mediterranean abandoned fields. *J. of Ecology* 56: 745-757.
- Meli, P., Rey Benayas, J. M. & Brancalion, P. 2019. Balancing land sharing and sparing approaches to promote forest and landscape restoration in agricultural landscapes: land approaches for forest landscape restoration. *Perspectives in Ecology & Conservation* 17: 201-205.
- Martínez-Baroja, L., Pérez-Camacho, L., Villar-Salvador, P., Rebollo, P., Quiles, P., Gómez-Sánchez, D., Molina-Morales, M., Leverkus, A. B., Castro, J. & Rey-Benayas, J. M. 2019. Massive and effective acorn dispersal into agroforestry systems by an overlooked vector, the Eurasian magpie (*Pica pica*). *Ecosphere* 10: e02989.
- Rey Benayas, J. M., Altamirano, A., Miranda, A., Catalán, G.P., Prado, M., Lisón, F. & Bullock, J.M. 2020. Landscape restoration in a mixed agricultural-forest catchment: planning a buffer strip and hedgerow network in a Chilean biodiversity hotspot. *Ambio* 41: 310-323 (DOI: 10.1007/s13280-019- 01149-2).
- Conrado da Cruz, D., Rey-Benayas, J. M., Ferreira, G., & Santos, S. 2020. Tree communities in 3-yr-old post-mining sites under different forest restoration techniques in the Brazilian Amazon. *Forests* 11: 527 (<https://doi.org/10.3390/f11050527>).
- Chazdon, R. L.; Lindenmayer, D.; Guariguata, M. R.; Crouzeilles, R; Rey Benayas, J. M.; & Lazos, E. 2020. Fostering natural forest regeneration on former agricultural land through economic and policy interventions. *Environmental Research Letters* 15: 043002 (<https://doi.org/10.1088/1748-9326/ab79e6>).
- Leverkus, A.B., Gustaffson, L., Lindenmayer, D., Castro, J., Rey Benayas, J. M., Rhanius, T. & Thorn, S. 2020. Salvage logging effects on regulating ecosystem services and fuel loads: A meta-analysis. *Frontiers in Ecology & Environment* 18: 391-400 (DOI 10.1002/fee.2219).
- Leverkus, A.B., Rey Benayas, J. M., Solís, P. & Sierra, J. M. 2020. Enabling conditions for the implementation and conservation outcomes of a private nature reserve. *Ecological Solutions and Evidence* 1: e12019 (<https://besjournals.onlinelibrary.wiley.com/doi/full/10.1002/2688-8319.12019>).
- Conrado da Cruz, D., Rey-Benayas, J. M., Ferreira, G., Santos, S. & Schwartz, G. 2021. An overview of forest loss and restoration in the Brazilian Amazon. *New Forests* 52: 1-16 (<https://doi.org/10.1007/s11056-020-09777-3>).
- Marchand, L.; Castagneyrol, B.; Jiménez, J. J.; Rey Benayas, J. M.; Benot, M.-L.; Alday, J. G.; Jaunatre, R.; Dutoit, T.; Buisson, E.; Mench, M.; Alard, D.; Corcket, E.; Martínez-Ruiz, C.; Le Roy, M.; Sawtchuk, J. & Comin, F. A. 2021. Conceptual and methodological issues in estimating the success of ecological restoration. *Ecological Indicators* 123 (<https://doi.org/10.1016/j.ecolind.2021.107362>).
- Martínez-Baroja, L., Pérez-Camacho, L., Villar-Salvador, P., Rebollo, P., Leverkus, A. B., Pesendorfer, M., Molina-Morales, M., Castro, J. & Rey-Benayas, J. M. 2021. Caching territoriality and site preferences by a scatter-hoarder drive the spatial pattern of seed dispersal and affect seedling emergence. *Journal of Ecology* 109: 2342-2353 (<https://doi.org/10.1111/1365-2745.13642>).
- López-Bedoya, P.A., Magura, T., Edwards, F.A., Edwards, D.P., Rey-Benayas, J.M., Lövei, G.L. & Noriega, G.A. 2021. What level of native beetle diversity can be supported by forestry plantations? A global synthesis. *Insect Conservation and Diversity* 14: 736-747 (<https://link.springer.com/article/10.1007/s10342-021-01423-7>).
- García de León, D., Rey Benayas, J. M. & Andivia, E. 2021. Contributions of hedgerows to people -- a global meta-analysis. *Frontiers in Conservation Science* 2: 789612

- (<https://www.frontiersin.org/articles/10.3389/fcosc.2021.789612/full>).
- Martínez-Baroja, L., Rey-Benayas, J. M., Pérez-Camacho, L. & Villar-Salvador, P. 2022. Drivers of oak establishment in Mediterranean old fields from 25-year-old woodland islets planted to assist natural regeneration. *European Journal of Forest Research* 141: 17-30 (<https://link.springer.com/article/10.1007/s10342-021-01423-7>).
- Rey Benayas, J. M., Martínez de Baroja, L., García de León, D., Crespo Cepas, G., Pajares Guerra, M., Pérez Camacho, L. & Villar Salvador, P. 2021. Plantación de islotes forestales y setos como infraestructura verde para ayudar la regeneración natural en paisajes agrícolas mediterráneos (Caso práctico XVI, en el Tomo 2). En: J. Pemán García, R. Navarro Cerrillo, M.A, Prada Sáez y Serrada Hierro, R. (coordinadores). Bases técnicas y ecológicas del proyecto de restauración forestal, Tomo 2, pág. 523-532. MITECO, Madrid (https://www.miteco.gob.es/es/biodiversidad/temas/desertificacion-restauracion/basestecnicasyecologicasdelproyectederepoblacionforestal-tomo2_tcm30-534171.pdf).
- Cruz-Alonso, V., Musálem, K., Mongil-Manso, J., Insrán, A., Viñegla, F. & Rey Benayas, J. M. 2022. Enhanced infiltration by trees in floodable cattle ranches in Paraguay. *Agroforestry Systems* (<https://link.springer.com/article/10.1007/s10457-022-00745-8>).
- Castellano, C., Bruno, D., Comín, F.A., Rey Benayas, J. M., Masip, A. & Jiménez, J.J. 2022. Environmental drivers for riparian restoration success and ecosystem services supply in Mediterranean agricultural lands. *Agriculture, Ecosystems & Environment* 337: 108048 (<https://doi.org/10.1016/j.agee.2022.108048>).

PhD THESIS ADVISED

1. Manuel García Sánchez-Colomer. 1999. *Heterogeneidad del medio abiótico, composición florística y diversidad en humedales montanos mediterráneos (sierra de Guadarrama)*. Universidad Autónoma de Madrid.
2. Antonio López-Pintor Alcón. 2001. *Dinámica de los sistemas retamar-pasto del centro de la Península Ibérica*. Universidad de Alcalá.
3. Luis Cayuela Delgado. 2006. *Deforestación y fragmentación de bosques tropicales montanos en los Altos de Chiapas, México. Efectos sobre la diversidad de árboles*. Universidad de Alcalá.
4. Enrique de la Montaña Andrés. 2009. *Diversidad de vertebrados terrestres en España. Identificación de áreas para la conservación, mitigación de impactos y gestión del monte mediterráneo*. Universidad de Alcalá.
5. William Fonseca González. 2009. *Restauración forestal y almacenamiento de carbono en el trópico húmedo (Zona caribe de Costa Rica)*. Universidad de Alcalá.
6. Bárbara Cuesta Poveda. 2010. *Revegetación de campos agrícolas abandonados en ambientes mediterráneos continentales*. Universidad de Alcalá.
7. María José Teixeira Assunção de Albuquerque. 2013. *Distribución y áreas relevantes de diversidad de vertebrados terrestres en Europa y América*. Universidad de Alcalá.
8. Juan S. Sánchez Oliver. 2013. *Efectos sobre la avifauna de las plantaciones forestales jóvenes en campos agrícolas mediterráneos*. Universidad de Alcalá.
9. Paula Meli. 2014. *Restauración de la biodiversidad y los servicios de los ecosistemas ribereños y otros humedales. Meta-análisis global y evaluación de especies útiles en el trópico mexicano*. Universidad de Alcalá.
10. Jennifer Schulz. 2014. *Landscape dynamics and perspectives for multifunctional forest landscape restoration in central Chile*. Technischen Universität München.
11. Carlos Zamorano Elgueta. 2014. *Definición de áreas prioritarias para la restauración forestal en la Cordillera de la Costa de la Región de Los Ríos, Chile*. Universidad de Alcalá.
12. Alexandro Bitol Leverkus. 2015. *Colonización de áreas incendiadas por quercíneas: análisis de la concordancia entre factores de dispersión y establecimiento y valoración económica de los servicios ecosistémicos*. Universidad de Granada.
13. Esteban Álvarez Dávila. 2018. *Relaciones entre gradientes de diversidad de árboles, carbono y clima en bosques neo-tropicales (Colombia)*. Universidad de Alcalá.
14. Verónica Cruz Alonso. 2019. *Long-term dynamics of forest recovery in Mediterranean abandoned fields: Outcomes, processes and drivers of contrasting restoration strategies*. Universidad de Alcalá.
15. Denis Conrado da Cruz. 2020. *Forest loss and forest restoration in the Brazilian Amazon. An overview and applied studies in Paragominas (Pará)*. Universidad de Alcalá.
16. Loreto Martínez de Baroja Villalón. 2021. *Factores determinantes del reclutamiento de encinas (Quercus ilex) en mosaicos agroforestales. Dispersión de bellotas por urracas (Pica pica) y establecimiento de plántulas*. Universidad de Alcalá.

[17-18: I am currently advising two PhD students whose theses will be presented in a near future].