

Dr. Isabel Donoso Cuadrado

Date of birth 30.01.1987, Bilbao, Spain
 Current affiliation Senckenberg Biodiversity and Climate Research Centre
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Current position

Since Oct. 2018 **Alexander von Humboldt postdoctoral research fellow, Senckenberg Biodiversity and Climate Research Centre (SBiK-F)**
 Working groups: PD Dr. Matthias Schleuning and Prof. Thomas Müller

Academic education and research experience

Oct 2017 - Sept 2018 **Postdoctoral researcher Senckenberg Biodiversity and Climate Research Centre**
 Working groups: Prof. Dr. Katrin Böhning-Gaese and PD Dr. Matthias Schleuning

June 2017 **International Doctoral degree** (PhD Biological resources and biodiversity),
 University of Oviedo, Spain

2013-2016 **Doctoral studies at University of Oviedo - Research Unit of Biodiversity (UO/CSIC/PA)**. Oviedo, Spain
 Working group: Prof. Dr. Daniel García
 - Ecological networks in the Anthropocene: mechanisms and structure of plant-frugivore interactions driving forest regeneration

2011-2012 **MSc. Global Change. Spanish National Research Council - Menéndez Pelayo International University**. Palma de Mallorca, Spain
 Working group: Prof. Dr. Anna Traveset
 - Testing the effect of climate change on temporal mismatching in plant-butterfly interactions: a modelling approach

2009-2010 **Research assistant. The Macaulay Land Use Research Institute**. Aberdeen, UK
 Working group: Dr. Javier Pérez-Barbería
 - Effect of climate change on behavioural interactions between red deer (*Cervus elaphus*) and sheep (*Ovis aries*) in the Scottish moorland.

2005-2009 **BSc. Environmental Sciences. University of the Basque Country (UPV-EHU)**.
 Vitoria-Gasteiz, Spain.

Grants and awards

Oct 2018 – Sept 2020 Alexander von Humboldt Postdoctoral fellowship (Germany), amount: 82,800 €

July 2018 German Academic Exchange Service (DAAD): Postdoc fellowship grant, amount: 48,500 € (declined)

Sept - Dec. 2015 Ministry of Economy and Competitiveness of Spain (MinECo). PhD mobility grant. Stay at Senckenberg Biodiversity and Climate Research Centre (BiK-F), amount: 4,931 €. Advisor: Dr. Matthias Schleuning.

April – June 2014 Ministry of Economy and Competitiveness of Spain (MinECo). PhD mobility grant. Stay at University of Canterbury (New Zealand), amount: 4,475 €. Advisors: Prof. Dr. Jason Tylianakis and Dr. Daniel Stouffer.

- Dic 2012 – Nov 2016 FPI Program-European Social Fund, Ministry of Economy and Competitiveness of Spain (MinECO), Spain. PhD scholarship, amount: 74,976 €
- 2011 Spanish National Research Council (CSIC). Postgraduate (Master) scholarship, amount: 1,300 €.
- 2009 *Leonardo Da Vinci training Placement*. European Lifelong Learning Programme-Basque Business Confederation (CONFEBASK), amount: 4,930.25 €

Publications

- (7) Peña, R., Schleuning, M., **Donoso, I.**, Rodríguez-Pérez, J., Dalerum, F. and García, D. (2020). Biodiversity components mediate the response to forest loss and the effect on ecological processes of plant-frugivore assemblages. *Funct. Ecol.* (in press).
- (6) **Donoso, I.**, Sorensen, M.C., Blendinger, P.G., Kissling, W.D., Neuschulz, E.L, Mueller, T. and Schleuning, M (2020). Downsizing of animal communities triggers stronger functional than structural decay in seed-dispersal networks. *Nat. Comm.* 11:1582
- (5) García, D., **Donoso, I.**, and Rodríguez-Pérez, J. (2018). Frugivore biodiversity and complementarity in interaction networks enhance landscape-scale seed dispersal function. *Funct. Ecol.* 32:2742-2752
- (4) **Donoso, I.**, García, D., Martínez, D., Tylanakis, J.M and Stouffer, D.B. (2017). Complementary effects of species abundances and ecological neighbourhood on the occurrence of fruit-frugivore interactions. *Front. Ecol. Evol.* 5:133. Special issue “Timely insights on fruit-frugivore interactions”
- (3) **Donoso, I.**, Schleuning, M., García, D. and Fründ, J. (2017). Defaunation effects on plant recruitment depend on size matching and size trade-offs in seed dispersal networks. *Proc. R. Soc. B.* 284:20162664
- (2) **Donoso, I.**, García, D., Rodríguez-Pérez, J. and Martínez, D. (2016). Incorporating seed fate into plant-frugivore networks increases interaction diversity across plant regeneration stages. *Oikos.* 125:1762-1771
- (1) **Donoso, I.**, Stefanescu, C., Martínez-Abraín, A. and Traveset, A. (2016). Phenological asynchrony in plant–butterfly interactions associated with climate: a community-wide perspective. *Oikos*, 125:1434-1444

Conference contributions

- (18) **Donoso, I.**, Sorensen, M.C., Blendinger, P.G., Kissling, W.D., Neuschulz, E.L, Mueller, T. & Schleuning, M (2020). Downsizing of animal communities triggers stronger functional than structural losses in seed-dispersal networks. *Talk*, 7th International Symposium on Frugivores and Seed Dispersal, Uttarakhand, India.
- (17) **Donoso, I.** (2019). Consequences of defaunation for seed dispersal in plant communities (*selected talk*). Network Meeting of the Alexander von Humboldt Foundation, Universität Hamburg, Germany
- (16) **Donoso, I.** (2019). Redes ecológicas en el Antropoceno: entendiendo los efectos del Cambio Global sobre las interacciones entre especies (*invited lecture*), Universidad Pedagógica y Tecnológica de Colombia - UPTC, Tunja, Colombia.
- (15) **Donoso, I.** (2019). Servicios ecosistémicos de aves en el antropoceno: implicaciones para la conservación. Congreso Colombiano de Servicios Ecosistémicos (*invited keynote speaker in the symposium: Aves y servicios ecosistémicos*), Cajicá, Colombia.
- (14) **Donoso, I.** (2019). Ecological networks in the Anthropocene: understanding global change impacts on species interactions (*invited lecture* for the Humboldt Salon – Regionalgruppe Rhein-Main), Darmstadt, Germany.
- (13) **Donoso, I.**, Sorensen, M.C., Blendinger, P.G., Böhning-Gaese, K., Kissling, W.D., Neuschulz, E.L, Mueller, T. & Schleuning, M (2019). Defaunation has a stronger impact on functional loss than on structural loss in seed dispersal networks. *Talk*, 1st Meeting of the Iberian Ecological Society & XIV AEET Meeting, Barcelona, Spain.

- (12) Higuera-Blanco, A.M., **Donoso, I.** & Rodríguez-Africano, P.E. (2018). La dinámica temporal y la estabilidad de interacción planta–ave dispersora de semillas en bosque Altoandino. *Talk*, V Congreso Colombiano de Zoología, Bogotá, Colombia.
- (11) Higuera-Blanco, A.M., **Donoso, I.** (2018). Efectividad de la dispersión de semillas por aves en bosque altoandino: una aproximación funcional. *Talk*, V Congreso Colombiano de Zoología, Bogotá, Colombia.
- (10) Peña, R., García, D., Schleuning, M., **Donoso, I.**, Dalerum, F. & Rodríguez-Pérez, J. (2018). Decay of animal functional diversity under habitat loss: an approach based on phylogeny, traits and ecological interactions. *Talk*, International Congress of the Spanish Society of Ethology and Evolutionary Ecology, Mieres, Spain.
- (9) García, D., **Donoso, I.** & Rodríguez-Pérez, J. (2018). Behavior-mediated complementarity between mammals and birds as seed dispersers in the Cantabrian mountains: implications for rewilding. *Poster*, International Congress of the Spanish Society of Ethology and Evolutionary Ecology, Mieres, Spain.
- (8) García, D., **Donoso, I.** & Rodríguez-Pérez, J. (2017). Complementarity in frugivore-plant networks enhances landscape-scale seed dispersal service. *Talk*, British Ecological Society annual meeting, joint with the GFÖ, NECOV and EEF, Ghent, Belgium.
- (7) García, D., Miñarro, M., **Donoso, I.**, Rodríguez-Pérez, J. & Martínez-Sastre, R. (2017). Servicios ecosistémicos por aves en agroecosistemas cantábricos: la biodiversidad importa. *Talk*, XXIII Spanish Ornithology Congress, Badajoz, Spain.
- (6) Peña, R., García, D., Schleuning, M., **Donoso, I.**, Dalerum, F. & Rodríguez-Pérez, J. (2017). Biodiversity under habitat loss: a functional approach based on plant-frugivore interactions. *Poster*, XXIII Spanish Ornithology Congress, Badajoz, Spain.
- (5) **Donoso, I.**, Schleuning, M., García, D. & Fründ, J. (2016). Efectos de la extinción de aves frugívoras en el reclutamiento de plantas ¿El tamaño importa? *Talk*, V Colombian Ornithology Congress, Medellín, Colombia.
- (4) **Donoso, I.**, García, D., Rodríguez-Pérez, J. & Martínez, D. (2015). Incorporating seed fate into plant-frugivore networks reveals changes in interaction diversity across plant regeneration stages. *Talk*, 2nd International Symposium on Ecological Networks. Bristol, UK.
- (3) García, D., **Donoso, I.** & Rodríguez-Pérez, J. (2015). Interaction networks and the Biodiversity-Ecosystem Functioning link: an example with seed dispersal by frugivorous birds. *Poster*, 2nd International Symposium on Ecological Networks. Bristol, UK.
- (2) García, D., **Donoso, I.**, Schleuning, M. & Fründ, J. (2015). Towards a functional view of seed dispersal networks: a framework based on seed disperser effectiveness and plant fate. *Talk*, 6th International Symposium-Workshop on Frugivores & Seed Dispersal. Drakensberg, South Africa.
- (1) García, D., Martínez, D., **Donoso, I.** & Rodríguez-Pérez, J. (2015). The biodiversity–ecosystem function link in frugivory and seed dispersal: effects across dispersal components and scales. *Talk*, 6th International Symposium-Workshop on Frugivores & Seed Dispersal. Drakensberg, South Africa.

Teaching experience and supervision

Oct. 2019	Advanced course “Analysis of defaunation in mutualistic networks” (16h). UPTC, Colombia.
2018-2019	<i>Teaching assistant</i> (42h): Master module “Community Ecology, Macroecology and Conservation”, Goethe University, Germany. Discussion of scientific papers, statistical analysis of community ecology datasets.
Nov. 2016	Workshop “Analysis of mutualistic networks: a tool for researching and conservation” (8h). Universidad de Antioquia, Colombia.
2013-2017	<i>Teaching assistant</i> (97h): Ecology (BSc. Biology), University of Oviedo, Spain. Field trips, laboratory and data analysis. Emphasis on river, marine and forest ecology.

2015-2016 *Teaching assistant* (14h): Applied Ecology (BSc. Biology), University of Oviedo, Spain. Lectures, data analysis and field trip. Emphasis on spatial, land-use planning and management, and population dynamics.

2015-2016 *Teaching assistant* (12h): Management of wildlife, game and fishing resources (BSc. Forest and Natural environment engineering), University of Oviedo, Spain. Lectures and data analysis. Emphasis on modelling population dynamics.

Bachelor theses

2017 Co-supervisor of Angie Milena Higuera Blanco: *Dispersión de semillas por aves en bosque Altoandino en el Parque Natural Municipal el Sinaí (Pachavita, Boyacá)*, Universidad Pedagógica y Técnica de Colombia, Tunja, Colombia

Academic services and affiliations

- **Organizer of Symposium:** “How a network approach advances our understanding on seed dispersal interactions in a changing world” at the 7th International Symposium on Frugivores and Seed Dispersal, Uttarakhand, India (2020).
- **Co-organizer** of a Biodiversity exhibition during the **Week of Science** at University of Oviedo (2017)
- **Co-organizer of Symposium:** “Birds and ecosystem functions: the ecological role of birds” at the V Colombian Ornithology Congress, Medellín, Colombia (2016)
- **Ad-hoc referee** for: *Acta Oecologica*, *AoB PLANTS*, *Conservation Letters*, *Ecology and Evolution*, *Ethology Ecology and Evolution*, *Écoscience*, *Functional Ecology*, *Journal of Ecology*, *Oikos*, *Plant Ecology and Diversity*, *Scientific Reports*.
- **Active memberships:** Asociación Española de Ecología Terrestre (AEET), Sociedad Ibérica de Ecología (SIBECOL)

Languages

- Spanish (mother tongue); English (fluent); French & Basque (moderate); German (basic knowledge)