

IRENE PAREDES LOSADA

Environmental Scientist

PhD in Environmental Sciences

BIO

I am a PhD in Environmental Sciences with background on aquatic ecology, management and conservation with special emphasis on water quality issues, eutrophication processes and human perturbations. Since 2009 I have worked in different research and interdisciplinary teams of recognized experience and prestige in Spain, the Netherlands, Brazil and the United Kingdom doing research on a broad variety of aquatic systems from urban ponds and intermittent streams to coastal lagoons and marshes of cold, tropical and Mediterranean environments.

PERSONAL INFO

Date of birth: 17 October 1986

Citizen: Spain

Driving licence: Yes

CONTACT

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Research Gate:

https://www.researchgate.net/profile/Irene_Paredes_Losada

LANGUAGE SKILLS

Spanish: Native speaker

English: Advanced level. TOEFL iBT certificate. Score 91. April 2013

Portuguese: Intermediate level

French: Elementary level

INFORMATIC SKILLS

- ArcGIS/QGIS
- R
- Excel
- Microsoft Office
- Photoshop
- Adobe Indesign

ACADEMIC QUALIFICATIONS

PhD in Environmental Sciences

Doñana Biological Station (EBD-CSIC)

Oct 2014 - Apr 2020

- *PhD thesis title:* "Anthropogenic pressures and eutrophication in the Doñana marsh and its watershed"
- *PhD objective:* to investigate the eutrophication issue in the Doñana wetland, a World Heritage Site in southwestern Europe by analyzing the spatio-temporal variation of nutrient pollution in surface waters and characterizing the sources of nitrogen by using stable nitrogen isotopes.
- *Advisors:* Andy J. Green, Francisco Ramírez and Manuela G. Forero
- *Date of defense:* 22nd April 2020

MSc Environmental Sciences

Wageningen University (WUR)

Sept 2008 - Aug 2010

- *Master thesis title:* "Potential accumulation of the cyanotoxin cylindrospermopsin in non-producing phytoplanktonic species".
- *Advisors:* Miquel Lüring and Antonio Quesada
- *Internship (4 months):* Laboratory of Ecophysiology and Toxicology of Cyanobacteria. Institute of Biophysics Carlos Chagas Filho. Federal University of Rio de Janeiro (UFRJ). Brasil.

4-Year Bachelor in Environmental Sciences

Autónoma University of Madrid (UAM)

Oct 2004 - Feb 2010

- *Erasmus grant* for one academic year at Wageningen University (WUR) from Sept. 2007 to June 2008.

GRANTS AND FELLOWSHIPS

Conference grant to attend and present an oral communication at the AIL meeting in Murcia, 22 - 26 June 2020. Iberian Limnological Association (AIL).

Workshop grant to attend and present a poster communication at the "Temporary wetlands future in drylands under the projected global change scenario" workshop in Baeza, Spain, 9-11 March 2020. International University of Andalusia (UNIA) and Jaén University (UJA).

Conference grant to attend the First Meeting of the Iberian Ecological Society in Barcelona, 04 - 07 Feb 2019. Iberian Ecological Society (SIBECOL).

PhD Fellowship. "La Caixa" Foundation under the Severo Ochoa Program for Centers of Excellence, Spain. Oct 2014 - Oct 2018.

Fellowship for short research stay in The Netherlands. Wageningen Institute for Environment and Climate Research (WIMEK), The Netherlands. Oct - Dec 2015.

Fellowship for short research stay in The Netherlands. Wageningen Institute for Environment and Climate Research (WIMEK), The Netherlands. Apr - Jul 2011 and Nov - Dec 2011.

STUDY AND RESEARCH ABROAD

Aquatic Ecology and Water Quality Management Department (AEW), Wageningen University (WUR), Wageningen, The Netherlands. Jul 2009 - Dec 2009; Aug - Oct 2011; Oct - Dec 2015

Freshwater Biological Association (FBA), Windermere, Cumbria UK. Jun 2013 - Aug 2014

Laboratory of Ecophysiology and Toxicology of Cyanobacteria. Institute of Biophysics Carlos Chagas Filho, Federal University of Rio de Janeiro (UFRJ), Brasil. Apr 2010 - Aug 2010

Wageningen University (WUR), Wageningen, The Netherlands. Sept 2007 - Jun 2008

PROFESSIONAL EXPERIENCE

Environmental technician. The Freshwater Biological Association (FBA). Lake District, Cumbria. UK. Jul - Aug 2014

Literature search on historical information to understand the present status of river basins and improve the water quality management in different UK catchments.

Freshwater bioremediation researcher (KTP Associate). The Freshwater Biological Association (FBA) and the University of Cumbria (UoC). Lake District, Cumbria. UK. Jun 2013 - Apr 2014

I studied the potential use of freshwater mussels as a bioremediation tool to mitigate algal blooms and reduce turbidity in nuclear ponds.

Research Assistant. Laboratory of Aquatic Ecology and Water Quality Management Group. Wageningen University, The Netherlands. Aug - Oct 2011

Project "Mitigating Cyanobacteria Nuisance" to get more insight in costs and effectiveness of measures to control eutrophication.

Research collaborator. Department of Wetland Ecology, Doñana Biological Station. Seville, Spain. Jul 2012 - Apr 2013

Laboratory experiments to determine how salinity, temperature and presence of parasites may affect the feeding rates of the invasive brine shrimp *Artemia franciscana* compared to its European congener *Artemia parthenogenetica* in hypersaline ecosystems in the South of Spain.

Student assistant. Laboratory of Aquatic Ecology and Water Quality Management Group. Wageningen University, The Netherlands. Jul - Dec 2009

Project focused on the article 8 of the 2006/7/CE Bathing Water Directive to determine the potential health risks due to harmful cyanobacteria. I participated on the processing and chemical analysis of freshwater samples.

CONTRIBUTIONS TO CONFERENCES

First Meeting of the Iberian Ecological Society

Barcelona University (UB), 4-7 Feb 2019
Collaboration with the organization committee and attendance

XIX Conference of the Iberian Limnological Association (AIL)

Coimbra University (Portugal), 24-29 Jun 2018
Oral presentation

Paredes, I., Ramírez, F., G. Forero, M., Green, A.J. Nitrogen stable isotopes ($\delta^{15}\text{N}$) in halophytes as a proxy for anthropogenic nitrogen pollution in intermittent Mediterranean wetlands.

SEFS10 Symposium of European Freshwater Sciences

Olomouc (Czech Republic), 2 - 7 Jul 2017
Oral presentation

Paredes, I., Ramírez, F., G. Forero, M., Bravo, M.A., López, S., Green, A.J. Identification of nitrogen pollution sources in the Doñana wetlands (southwestern Spain) using stable isotopes

ABE Aquatic Biodiversity and Ecosystems Conference

Liverpool (UK) 30 Aug - 4 Sept 2015
Oral presentation

Paredes, I., Ramírez, F., G. Forero, M., Espinar, J.L., Green, A.J. Piecing together the water quality deterioration in the Doñana Marsh (southwestern Spain) over the past 20 years

SETAC Europe 25th Annual Meeting

Barcelona (Spain) 3 -7 May 2015
Poster (presented at conference by A. Koelmans)

Paredes, I., Koelmans, A.A., Besseling, E. Interactions of microplastics with freshwater mussels (*Anodonta anatina*).

ASLO Aquatic Sciences Meeting

Granada, 22-27 Feb 2015
Poster

Paredes I., Báñez C., López R., Ramírez F., Bravo M.A., G. Forero M., Green A. Stable isotopes as tracers of anthropogenic nutrient inputs in two different aquatic systems in southern Spain

Global Change in the Mediterranean Symposium

Seville (Spain), 15-16 Nov 2012
Poster

PM.I. Sánchez, B.B Georgiev, P. Nikolov, G. Vasileva, N. Varo, J. A. Amat, C. Matesanz, C. Ramo, **I. Paredes** & A.J. Green. The invasion of *Artemia franciscana* in the Mediterranean Region: a matter of parasites?

XIII Brazilian Limnology Conference

Natal, Brasil, 4-8 Sept 2011
Attendance

Second Iberian Meeting of Cyanobacteria (CIC2011)

Seville, 7-8 Jul 2011
Attendance

Environmental National Conference CONAMA10

Madrid, 22-26 Nov 2010
Attendance

VIII International Conference about Toxic Cyanobacteria (ICTC8)

Istanbul (Turkey), 29 Aug - 4 Sept 2010

Paredes I., Wormer, L., Cirés, S., Lürling, M., Quesada, A. Potential accumulation of cylindrospermopsin in phytoplanktonic species.

first Iberian Meeting of Cyanobacteria (CIC2009)

Porto (Portugal), 6-7 Jul 2009
Attendance

LIST OF PUBLICATIONS

Paredes, I., Ramírez, F., Aragonés, D., Bravo, M.A., Forero, M.G., Green, A.J.. Ongoing anthropogenic eutrophication of the catchment area threatens the Doñana World Heritage Site (South-west Spain). *Submitted*

Paredes, I., Otero, N., Soler, A., Green, A.J., Soto, D.X. 2020. Agricultural and urban delivered nitrate pollution input to Mediterranean temporary freshwaters. *Agric. Ecosyst. Environ.* 294, 106859.
<https://doi.org/10.1016/j.agee.2020.106859>

Paredes, I., Ramírez, F., Forero, M.G., Green, A.J., 2019. Stable isotopes in helophytes reflect anthropogenic nitrogen pollution in entry streams at the Doñana World Heritage Site. *Ecol. Indic.* 97, 130–140.
<https://doi.org/10.1016/j.ecolind.2018.10.009>

Sánchez, M. I., **I. Paredes**, M. Lebouvier, and A. J. Green. 2016. Functional role of native and invasive filter-feeders, and the effect of parasites: Learning from hypersaline ecosystems. *PLoS One*. doi:10.1371/journal.pone.0161478

WORKSHOPS AND MEETINGS

Workshop "Temporary wetlands future in drylands under the projected global change scenario" organized by the International University of Andalusia (UNIA) and Jaén University (UJA). Baeza (Spain) 9-11 March 2020
Poster presentation

Workshop for experts: "Strategic Plan for the Restoration of the Guadalquivir Estuary" organized by WWF-Spain Sanlúcar de Barrameda (Spain) 3-4 Oct. 2019
Participation

International Workshop EBD-MABH organized by Dr. Andy Green at Doñana Biological Station (EBD-CSIC) Seville (Spain), 2-4 May 2018
Oral presentation

Meeting CTM2007-30981-E: Expanding cyanobacteria studies and its impact in Spain Faculty of Biology. Autónoma University of Madrid Madrid (Spain) 23 Jan 2009
Attendance

PUBLIC OUTREACH

Interview for the National Spanish Council (CSIC) (February 2020)
<http://www.d-andalucia.csic.es/es/noticia/un-estudio-liderado-por-csic-determina-principales-fuentes-contaminacion-por-nitratos-en>

Interview on the Spanish National Journal 'La Vanguardia' (Oct 2018)
<https://www.lavanguardia.com/vida/20181011/452299398594/estudio-del-csic-alerta-de-la-contaminacion-por-actividad-humana-en-donana.html>

Participation on the 14th, 16th and 17th Sciences Fair of Seville to teach about aquatic ecology to primary and secondary school students through interactive activities. Seville (Spain) 2016, 2018, 2019.

Participation on the European Researchers' Night with a workshop for children about the importance of water for nature and society. Seville (Spain) Sept 2018.

COURSES

Statistics with R software: linear models and extensions (25 hrs)
Doñana Biological Station (EBD-CSIC)
24-28 Sept 2018. Seville (Spain)

Advanced course on QGIS (30 hrs)
Doñana Biological Station (EBD-CSIC)
10-14 Sept 2018. Seville (Spain)

Training school COST-SMIREs on biogeochemistry of intermittent streams: techniques and concepts (40 hrs)
Girona University (UdG)
25-29 Sept 2017. Caldes de Malavella (Spain)

Introduction to QGIS (30 hrs)
Doñana Biological Station (EBD-CSIC)
27-31 Mar 2017. Seville (Spain)

Scientific writing and oral presentation for conferences (20 hrs)
Doñana Biological Station (EBD-CSIC)
18-21 Oct 2016. Seville (Spain)

Temporal series applied to environmental data (33 hrs)
Doñana Biological Station (EBD-CSIC)
11-15 May 2015. Seville (Spain)

Stable isotopes in ecology and environmental studies (30 hrs)
Doñana Biological Station (EBD-CSIC)
6-8 Oct 2014. Seville (Spain)

Data analysis for aquatic ecologists using R (24 hrs)
Bournemouth University
24-27 Feb 2014. Bournemouth (UK)

COLLABORATIVE SCIENCES PROJECTS

Currently participating in the URBIFUN project:
Urbanization effects on the relationship between microbial biodiversity and ecosystem functioning

The Project is meant to promote scientific networking among young researchers of the AIL (Young-AIL) and to create synergistic interactions that lead to new knowledge on limnology.
<https://urbifun.jail.wixsite.com/urbifun>