

Date of AVC	01/01/2024
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Part A. PERSONAL DATA

Name	Ana		
Last name	Calbet Gento		
Gender (*)	Mujer	Date of birth (dd/mm/yyyy)	01/07/1996
Email address	z02cagea@uco.es	Web URL	https://orcid.org/my-orcid?orcid=0000-0002-2665-4921
Open Researcher and Contributor ID (ORCID) (**)	0000-0002-2665-4921		

A.1. Situación profesional actual

Organism	Instituto Andaluz de Investigación y Formación Agraria, Pesquera, Alimentaria y de la Producción Ecológica, IFAPA
Dept.	Natural and Forest Resources Area
Supervisor	María P. González Dugo

A.2. . Previous professional status

Organism	University of Cordoba
Dept.	Agronomy Department
Supervisor	M ^a . José Polo Gómez

A.2. Academic background

Bachelor/Master's Degree	University	Year
Degree in Environmental Engineering	Polytechnic University of Madrid	2013-2020
Master in Forestry Engineering	University of Cordoba	2020-2022

Part B.

FREE SUMMARY OF THE CURRICULUM

I graduated in Environmental Engineering at the Polytechnic University of Madrid in 2020, and during the years 2020 and 2022, I earned my Master's in Forestry Engineering at the University of Córdoba (UCO). While studying for my master's degree, I joined the River Dynamics and Hydrology Group (GDFH). Although I work at the theoretical level, I value that part of my work is done in the field and that I can apply my knowledge practically. This is one of the reasons why I directed my studies towards the conservation and protection of ecosystems, with particular interest in our Mediterranean forest landscapes.

The objective of the TFG project was to design an urban park in the municipality of Rivas-Vaciamadrid. The design of the space was proposed according to the principles of



sustainability: adapted to the needs of the environment, with minimum water requirements, efficient irrigation installation and use of renewable energies, by the needs of the local population (score of 9.5). The objective of the TFM project was to improve and integrate the landscape and environment on the southern slope of the town of Benamejí. To this end, it was proposed to recover and restore degraded areas, maintain and strengthen natural resources, protect and fix the soil to reduce erosion processes and enhance the value of the natural environment. (Score 7)

During my master's degree, I joined the GDFH as part of the project "Hydrometeorological trends in mountain protected areas in Andalusia: examples of co-development of climate services for climate change adaptation strategies" (MONADA). The project's objective is to establish a bridge between the different sources of information (ecological, hydrological, and meteorological) available and the local information needed by the user for management (e.g., specific ecohydrological indicators of representative species).

During this period, I acquired knowledge related to ecological processes in Mediterranean areas, data analysis, and academic dynamics, which will be useful for a doctoral thesis in the chosen field. I have worked on the processing and analysis of data series (e.g., meteorological and satellite), generating trend maps with different temporal and spatial resolutions.

During my undergraduate studies, I also worked with GIS and remote sensing techniques. Currently, I am expanding my programming skills (R and Python), which are essential for developing models and data analysis. I have also conducted field experiments, showing initiative and ability to work in a team.

I presented at the EGU 2023 international conference a study framed in the MONADA (Calbet et al., 2023), and we are preparing an article for publication in an indexed journal. I have generated technological knowledge through writing and making reports and presentations. I consider it essential to disseminate science, and I participate in initiatives such as 11F to make the role of women scientists visible in "La Noche de los Investigador@s" and "Ingenios en Ruta". As a result, I am expanding and improving my knowledge related to scientific writing, as well as my social and communication skills.

I have a Predoctoral contract grant from the Ministry of Science and Innovation (PRE2022-105210) to carry out my thesis at the Andalusian Institute for Research and Training in Agriculture, Fisheries, Food and Ecological Production, IFAPA. I will develop my studies in the R&D project: "Evaluation of the influence of climatic variability on the production and phenology of holm oak. Development of a predictive model of acorn production" within the PhD program "Dynamics of Biogeochemical Flows and their Applications" by the University of Cordoba, the University of Granada and the University of Malaga. The main objective of the project is to analyse the impact of climatic variability on acorn production and phenology of the holm oak, as well as to propose indicators linked to fruit production; the aim is to analyse the usefulness of high-resolution remote sensors for monitoring phenology, the study of the impact of extreme climatic events, and the development of a proposal for an integrated information scheme on acorn production, which combines the information obtained from the different processes involved in the reproductive cycle.

I have international experience and adapt well to new spaces and cultures. I worked in Greece in a non-profit organisation dedicated to biodiversity research and advocacy (Archipelagos, 2018). I have also worked outside of academia, which can give me a different perspective on management in the R&D Department of a Spanish company (EcoHidro, Murcia, 2019) that specialises in developing projects for water treatment.

I did my master's internship in the Project "From Chlorine to Biodiversity" (IMGEMA-Real Jardín Botánico de Córdoba, Córdoba, 2022), which aimed to create biodiversity hotspots



within cities by naturalizing ponds. This project opened the doors to a world of hydrology that I had previously been unaware of.

Part C. MOST RELEVANT SCIENTIFIC AND TECHNICAL MERIT

C.1. Publications.

In preparation: Calbet A., Andreu A., Polo M.J., Aparicio J., Torralbo P., Pimentel R. Trend analysis on eco-hydrological indicators as management tools in Mediterranean Environmental Protected Areas: The case study of Sierras Subbéticas Natural Park (Spain). Personal contribution: data processing, analysis and interpretation, manuscript writing, support in fieldwork to collect meteorological data, maintenance and installation of new meteorological stations, and support in conceptualising experiments and analysis.

C.2. Congresses in which it has participated.

Oral presentation, April 2023: Calbet A., Andreu A., Polo M.J., Aparicio J., Torralbo P., Pimentel R. Trend analysis on eco-hydrological indicators as management tools in Mediterranean Environmental Protected Areas: The case study of Sierras Subbéticas Natural Park (Spain). EGU General Assembly 2023, Vienna, 2023. Presentación oral 23-27 Abril 2023.

C.3. Projects or lines of research in which you have participated.

- Collaborator. 01/05/2023 to 30/04/2026. Advances in research and technological innovation of the dehesa for management adapted to global warming (IN-DE). Institutions: IFAPA. 206.572 €. Funding: IFAPACORRESPONDING TO THE YEAR 2022 INTERNAL CALL FOR STRATEGIC LINES PROJECTS. FEDER funds.
- Contributor. 15/03/2022-30/03/2023. Hydrometeorological trends in mountain protected areas in Andalusia: examples of co-development of climate services for climate change adaptation strategies (MONADA). Institutions: UCO. 182.756 €. Personal contribution: Implementation of the new weather stations in the Cardeña and Sierras Subbéticas Natural Park, fieldwork in the Sierra Nevada and Sierra Seca, selection of representative weather stations for each Natural Park, treatment, processing and generation of meteorological and satellite data time series, generation of daily historical series of precipitation and temperature maps, analysis of annual and decadal trends of meteorological variables and determination and generation of indicators. Research-related work includes writing reports, articles, abstracts for congresses, scientific dissemination, fieldwork, etc.
- Contributor. "From Chlorine to Biodiversity" National Plan of Green Structure and Climate, Naturalization of Ponds. IMGEMA-Royal Botanical Garden of Cordoba. Personal contribution: Support for naturalising ponds and nursery areas reproducing aquatic plants.

C.4. Contracts, patents and other technological or transfer merits

- Aid for Predoctoral Contracts for the training of PhDs (PRE2022-105210). The title of the R&D Project is "Evaluation of the influence of climatic variability on the production and phenology of acorns. Development of a predictive model of acorn production" (INIA-2022-0001).
- Scientific and technical justification report for R&D&I projects to agents of the Andalusian knowledge system (PAIDI2020) of the Project Hydrometeorological trends in mountain protected areas in Andalusia: examples of co-development of climate services for climate change adaptation strategies (MONADA) P20_00178. Personal contribution: support in the drafting and conceptualisation of the report.

C.5. Other merits

- Dissemination Activities: 2023 11F Las que cuentan la ciencia, 2023 Ingenios en Ruta, 2022 La Feria de los Ingenios. Profile in #LaNocheDeLosInvestigador@s: Ana Calbet Gento - The European Researchers' Night
- Software: high level in QGIS, ArcGIS, Rstudio, Anaconda, office automation tools (e.g., Microsoft Office), WiMMed (Polo et al., 2009 WiMMed is a watershed-scale hydrological management model).
- Basic knowledge/programming skills (R and Python).
- Course. R Programming Environment. Junta de Andalucía. Number of hours: 24.
- Course. Remote Sensing for Soil Moisture: data sources, processing and assimilation for hydrological modelling. Training Network courses, 2023, CEIA3. Number of hours: 33.
- Course. Sarrazin F., Pianosi F., Wagener T., Noacco V. Why and how should we use Sensitivity Analysis for modelling? 2022. Number of hours: 6.
- Course. MOOC. Sustainable soil management, edX Platform, Wageningen University & Research. 2019. Number of hours: 70.
- Course. MOOC. Technologies to combat climate change: Geological storage of CO₂, Miriadax Platform. 2019. Number of hours: 30.
- Internships. IMGEMA-Royal Botanical Garden of Córdoba. Program "From Chlorine to Biodiversity" National Plan for Green Structure and Climate, Naturalization of Ponds. Nursery and plant reproduction area. COA Herbarium. Number of hours: 176.
- Stay. 6 months at Archipelagos Institute of Marine Conservation, Samos, Greece. 2018.
- Volunteering: Work camp, Bulgaria. 2017. Number of hours: 160.
- Accredited language level: English, B2 (Issued by British Council).