

Forest Science and Technology Centre of Catalonia (CTFC) is a research centre affiliated with the Generalitat de Catalunya (the Catalan government), and it reports to the Ministry responsible for forest issues.

CTFC is a CERCA centre and a government accredited TECNIO agent (developer of public technology).

It was granted a 'Human Resources Excellence in Research' award by the European Commission, recognizing CTFC as a European research institution that fosters an attractive and motivating work environment..

# POST-DOCTORAL POSITION ON ACOUSTIC BIRD MONITORING AND DATA INTEGRATION

### **Reference:** 25-02-00008

One new position for a **post-doctoral researcher** is open at **Forest Science and Technology Centre of Catalonia** (CTFC, <u>http://www.ctfc.cat</u>) to contribute to the <u>TABMON</u> project (Project PCI2022-132974, financed for MCIN/AEI/10.13039/501100011033) a cutting-edge project in acoustic bird monitoring un Europe. The candidate will collaborate with the Catalan Ornithological Institute (ICO, <u>http://www.ornitologia.org</u>) and will be involved in international monitoring networks on bioacoustics promoted by the Europea Bird Census Council (EBCC, <u>https://www.ebcc.info</u>).

We are seeking an **experienced ecologist or conservation scientist with a solid background in bioacoustics and biodiversity monitoring**, coupled with strong technical skills in data science and ecological modeling, **to work on large-scale**, **transnational projects with a focus on integrating cutting-edge technology into biodiversity monitoring** at different spatial sclaes (from subnational to European). The post-doctoral researcher will work ensuring the integration of acoustic bird monitoring data into EU-wide platforms with standardized protocols for comparability, and in close collaboration with the Catalan Ornithological Institute will develop workflows and showcases demonstrating how acoustic data can complement national monitoring efforts, improving analyses of species distributions, population abundance, and migration phenology while addressing data gaps.

The Forest Science and Technology Centre of Catalonia (CTFC), located in Solsona (PrePyrenees, 120 km from Barcelona), Spain, employs app. 160 staff, produces >120 scientific articles annually and has a turnover of app. 9 Mil. €/year. Further institutional information is available at: www.ctfc.cat/en

### TERMS OF THE APPOINTMENT

- Incorporation: March 2025.
- Temporary contract of fixed duration: 2 years
- Working hours: full-time, 37.5 hours per week.
- Workplace: Solsona (SPAIN), with the possibility of partial teleworking.
- Salary: according to skills and experience provided.



#### **KEY RESPONSABILITIES**

- 1. **Develop and standardize protocols** for integrating acoustic bird monitoring data into EU-wide platforms, addressing AI detection uncertainties.
- 2. **Design and implement workflows** to harmonize acoustic and traditional monitoring datasets, ensuring data quality and compatibility.
- 3. Lead the creation of EBV showcases, demonstrating how acoustic data complements monitoring of species distributions, abundance, and migration phenology.
- 4. **Collaborate with partners and stakeholders** to ensure the proper functioning of the monitoring devices, refine workflows, reporting standards, and ensure practical relevance of methods.
- 5. **Coordinate and contribute to workshops and meetings**, acting as CTFC's liaison to share progress and align deliverables across tasks.
- **6.** Lead high quality scientific outputs in the form of journal publications and contribution to relevant policy reports.

### **BASIC REQUIREMENTS**

- 1. PhD. in a relevant field such as Ecology, Conservation Biology, Bioacoustics, Computational Science or Environmental Science.
- 2. Strong interdisciplinary foundation combining ecology with data management and technology.
- 3. Proven experience in biodiversity monitoring methods, and familiarity with acoustic monitoring techniques, preferably on birds
- 4. Experience with sound-based monitoring techniques, such as using autonomous recording units, and knowledge of audio processing tools and machine learning algorithms for bioacoustics (e.g., BirdNET, Kaleidoscope, or custom AI models).
- 5. Proficiency in managing large-scale ecological datasets, including long-term and transnational data.
- 6. Expertise in statistical modeling for species distribution, population dynamics, or migration phenology, and knowledge of Essential Biodiversity Variables (EBVs) or similar frameworks.

### **DESIRABLE REQUIREMENTS**

- 1. Contrasted capacity to lead work and team up with other researchers.
- 2. Proficiency in programming languages (e.g., Python, R) for data analysis, modeling, and visualization.
- 3. Experience with bioacoustic tools and libraries for data processing and AI/ML pipelines.
- 4. Expertise in statistical modeling for species distribution, population dynamics, or migration phenology, and knowledge of Essential Biodiversity Variables (EBVs) or similar frameworks.
- 5. Familiarity with the deployment and maintenance of autonomous recording units in field settings.

## SOFT COMPETENCES

- 1. Team player.
- 2. Critical thinking and attention to detail.
- 3. Capacity to work under pressure.



- 4. Ability to work in a multidisciplinary environment.
- 5. Ability to plan and organize their work independently.
- 6. Result oriented.
- 7. Flexibility and adaptation.
- 8. Initiative and pro activity.
- 9. Availability to travel sporadically.

### CONTACT

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The CTFC guarantees an open, transparent, and merit-based recruitment process (OTM-R) to all registered candidacies, thereby avoiding any bias related to gender, origin, age, ideology, or other circumstances that could be discriminatory. Integration policy: Candidates who have a recognized disability and accredited equal to or greater than 33%, will be prioritized, provided that the disability is compatible with the proper performance of the job.

### **SELECTION PROCESS AND CRITERIA**

The selection process is led by the Human Resources Area of CTFC and the and contracting department. This process consists of:

- 1. **1.**Admission of candidates: applicants must submit a curriculum vitae, motivation letter and, and two completed and signed annex documents found in the offer, enter in www.ctfc.cat/registre.php, until 22<sup>th</sup> february 2025 at 14:00, indicating the reference code of the offer.
- 2. **Pre-selection:** verification of compliance with the minimum requirements of the offer.
- 3. Selection (March 2025): assessment of the preselected candidates by scoring based on objective criteria and interview.
- 4. **Final decision:** in case of finding the suitable person, the election will be formally communicated to him/her, and the identification of the chosen person will be published on CTFC job openings section.

Further information: <a href="mailto:borsa.treball@ctfc.cat">borsa.treball@ctfc.cat</a>

Indicative Calendar	
15 working days	Publication and dissemination of the job offer: CTFC website, SOC Office and other
	dissemination channels.
Next 2 working days	Preselection: determination of compliance with the minimum requirements of the offer. Evaluation of the pre-selected candidacies, through a score based on objective criteria, and



	suitable pre-selected CVs are forwaded to the Selection Committee for review .
	Sending informative mail to CVs not suitable to continue in the process.
Next 2 working days	Selection committee celebration: Interview with the selected suitable candidates.
	Selection Committee Minutes with the selected candidate and the reasons for the selection. Publication in the CTFC job board of the resolution identifying the elected person.
	Sending informational Mail to suitable CVs interviewed not selected.
Next 1 working day	Sending to Human Resources the official documentation necessary to process the employment contract, and coordination with the start date of the contract.
March 2025	Start of the contract.