

Science and Methods Manager

- Cool Farm Tool – Role Description

Background

The Cool Farm Alliance (CFA) is a not-for-profit member organisation that owns and operates the Cool Farm Tool (CFT), which is used to measure on-farm environmental sustainability. Usage of the CFT and membership of the CFA has grown rapidly, to become the leading global software for measuring farm sustainability.

We are now looking for a Science and Methods Manager to support the activities of the Research Advisory Board and to lead the maintenance and further development of the methods embedded in the Cool Farm Tool. The candidate must be comfortable working with a dynamic, multi-stakeholder membership organization and on a product that sits at the juncture between emerging science, quantification methods for a range of ecosystem services and software product development and delivery.

The Cool Farm Tool translates science into a user-friendly decision support tool - asking minimal questions and providing the user with maximum useful information. It is the purview of the Research Advisory Board, staffed by the Science and Methods Manager, to oversee the scientific credibility of the methods used in the Cool Farm Tool. This includes continuously improving the methods in the Cool Farm Tool in response to the latest science and new available technology and assuring the quality of their implementation, documenting the tool's scientific credibility, and being responsive to user feedback and questions regarding quality and optimal functioning of the methods. The Research Advisory Board is comprised of the Science Committee or "Innovation Hub" and the Methods Committee.

The methods in the Cool Farm Tool sit between science and software and create a conduit from one to the other in response to industry needs and based on available science. Thus, the roll involves working closely with the Science Committee members to stay abreast of and where possible, advance the latest science to meet the needs of industry while also working closely with the DevOps Committee to oversee method implementation.

Above all, the role requires a proactive, dynamic approach to serve member needs and to continue to build momentum in a rapidly changing sector, helping to lead an organisation with a global reach and diverse set of stakeholders.

The role

- **Continuously improve CFT methods**
 - Staff the Methods Committee, to identify, prioritize and scope possible improvements to existing methods and new method and indicators.
 - Coordinate and schedule committee meetings with members, develop agendas and document outcomes in meeting notes and follow up on actions to ensure they are complete.

- Work closely with relevant stakeholders to evaluate, design, review, and specify new methodologies for the CFT. Document and prepare methodologies for integration into the CFT.
- Project manage methods development to timelines and budgets.
- Pro-actively seek out opportunities to improve the CFT via collaborations with funding bodies, members, partners and external stakeholders.
- Identify and engage with suitable research projects that provide relevant new science for the CFT.
- **Document the scientific credibility of the CFT**
 - Maintain up to date, clear and concise technical documentation on the underlying CFT methods, algorithms and data sets across all product and metric pathways, for technical audiences.
 - Develop and maintain an up to date, clear and concise technical summary document (or laypersons technical guide), that explains the CFT methodology in an easily accessible style and format.
 - Maintain the **Methods Status Document**, with headings aligned with the section headings of the Cool Farm Tool Technical Documentation. This document records and annually updates the status of the various Cool Farm Tool methods and reference data sets, as to:
 - **whether they are comprehensive** (geographic applicability, sensitivity to farm management practices, production systems and products),
 - **whether they are up-to-date** (age of existing methods and data sets and whether significant new science or updates have emerged since),
 - **quantification of uncertainties**, and
 - **knowledge gaps** (where there are no known existing methods or data sets meeting CFT needs).
- **Assure the quality of the methods implemented in the CFT**
 - Staff the Science Committee to enable a pathway between latest science, through method development and into software delivery. Maintain a Science Research List that funnels the latest science into the CFT and reflects the industry needs for new science, and work with research bodies that can execute and deliver that science.
 - Where elements of the methods are identified as requiring scientific improvement, work with the Research Advisory Board to specify the required improvements and support proposals to meet the identified needs.
 - As science/research proposals stem from academic partners, review proposals for fit relative to the needs and priorities for method development in the CFT.
 - Provide science/methods support to the DevOps Committee on the implementation or modification of the online Cool Farm Tool. This function includes Gate-keeping – cross reference CFT Technical Documentation with CFT source code to ensure accuracy in the modelling.
- **Support members and prospective members**

- Support CFT users with their methodology enquiries.
- Clearly communicate functionality, purpose and design of the methods to technical and non-technical audiences.
- **Marketing**
 - Lead methods development communications with members and users, in partnership with the Communications Manager.
 - Present updates and share current priorities to relevant working groups and in live conferences, virtual meetings and events.
 - Promote the CFA/CFT and identify new opportunities.

KNOWLEDGE, EXPERIENCE & CAPABILITIES:

Essential requirements

- Firm understanding of ecosystem science and an ability to translate knowledge into quantification methodology that is accessible, practical and action oriented.
- Strong scientific and quantitative skills including different modelling approaches, statistics and maths.
- Proven program management experience
- Proven ability to structure and prioritise work
- Strong interpersonal and relationship management skills
- Passion for sustainable agriculture
- Master's degree or higher (Natural, Environmental, Agriculture Sciences or environmental engineering, or similar).
- Fluency in English
- Experience working in:
 - Agriculture.
 - Greenhouse gas assessments.

Desirable

- Knowledge on existing environmental accounting standards and guidelines (e.g. IPCC, GHG Protocol, Water Footprint Assessment Manual etc.)
- Knowledge and understanding of coding languages (Python preferred).
- Excellent technical, written and verbal communications skills.
- Entrepreneurial spirit and team player.
- Curious mindset and a willingness to learn and enquire.
- Business proficiency in other European languages.

ABOUT THE TEAM

This role leads the development of the Cool Farm Tool and supports the CFA General Managers and the Chairs of the RAB, Science and Methods Committees. The role will work closely with the CFA management team, the CFA advisors, and the CFA membership.

The CFT is currently developed by a small team of sub-contracted developers based in the UK. The developers are experienced with the CFT and have daily interaction with the CFA. Included in the team

is a lead engineer, software developers and a project manager.

The CFA is host to some world class expertise in the areas of science and methodology for GHG emissions. Direct access to this expertise is readily available to this role.

ABOUT THE PRODUCT

The CFT has been an online agricultural sustainability web app tool for seven years and currently services some 17,900 users from farmer to multi-national corporation across 140 countries. The CFT consists of multiple environmental sustainability modules including greenhouse gas emissions, water, biodiversity and food loss and waste. These modules are available for environmental evaluation of multiple crop and livestock types and species.

The CFT is written in Django with Python infrastructure.

WORKING ARRANGEMENTS

The CFA is a virtual organisation, so this role is home based and the Science and Methods Manager will need to be self-sufficient for office space. It is desirable to be located in Europe, and with the ability for international travel around 4 times a year, subject to covid travel restrictions.

WORKING HOURS

This is a full time, employed position, however we offer flexibility for the individual to choose patterns of work to suit their lifestyle and commitments.

APPLICATIONS

If you would like to learn more about this opportunity and apply for the position, please send your CV to our resourcing specialist: lauraalcock@elasticatedminds2.com.

The deadline for applications is 27th August 2021.