### JOB DESCRIPTION

JOB TITLE Forest Carbon Analyst
JOB FAMILY Science
STATUS Salaried



### A LITTLE ABOUT US

Founded in 1951, The Nature Conservancy (TNC) is a global conservation organization dedicated to conserving the lands and waters on which all life depends. Nature United is the Canadian affiliate of TNC. TNC follows a holistic approach to **protect** vital lands and waters, **transform** the way natural resources are used and managed and **inspire** to equip others to contribute to the shared vision of a healthy and sustainable future for lands, waters, wildlife and people. Guided by science, we create innovative, on-the-ground solutions to our world's toughest challenges so that nature and people can thrive together. We are tackling climate change, conserving lands, waters and oceans at unprecedented scale, providing food and water sustainably and helping make cities more sustainable. A commitment to diversity is one of our core values. Therefore, we strive for a globally diverse and culturally competent workforce. Working in 72 countries, including all 50 United States, we work collaboratively with Indigenous peoples, communities, governments, the private sector, and other non-profit partners. To learn more, visit www.nature.org or follow @nature press on Twitter.

TNC has shown that natural climate solutions (NCS)—protecting, sustainably managing, and restoring forests and other natural and working lands—can provide up to a third of the solution needed by 2030 to avoid the worst impacts from climate change. As public concern about climate change drives corporate and other net-zero commitments, interest in carbon markets is growing exponentially. Around the world, TNC is working with land managers and with leading companies to help them meet their net-zero commitments through voluntary and compliance carbon market projects.

#### YOUR POSITION WITH TNC

The Nature Conservancy's North America Region is expanding our capacity to conduct rigorous applied scientific investigations of the impacts of forest management on carbon and natural resource production on private lands in the United States. The Forest Carbon Analyst provides technical and scientific support for a carbon program aimed at incentivizing forest landowners to improve their management activities. The Forest Carbon Analyst will work within a highly collaborative, driven, team of foresters, scientists, policy and financial experts, and programmatic staff at TNC and our partner organizations. They will work at the direction of the US and Canada Carbon Market Science Director to conduct timely applied scientific investigations to inform implementation carbon projects. The Analyst's time will be focused on supporting the development of the Family Forest Carbon Program (FFCOP). a partnership TNC and American Forest Foundation program

This position is funded for two years, and it is anticipated that the position will end at that time. An extension may be possible based on needs and funding availability.

The location for this position is flexible to any place in the US where TNC has an already established office.

# **ESSENTIAL FUNCTIONS**

The Forest Carbon Analyst works collaboratively within the North America Region, and in close collaboration with members of the NCS Science Team, to process and analyze data, build remote sensing and forest management models, interpret and synthesize results, draft reports, build analytical tools, and disseminate key results to TNC field teams and partners. They will work primarily on topics related to the impact of forest management on standing carbon stocks. Their work will focus largely on analysis of forest inventory data, growth and yield modeling, and determining the additionality of IFM carbon mitigation projects. The Forest Carbon Analyst will lead all modeling necessary to support this work at the direction of the US and Canada Carbon Market Science Director and other TNC scientists. The ideal candidate will be a competent statistician and experienced coder; comfortable working in R; familiar with forest inventory and vegetation data, especially USDA Forest Service Forest Inventory and Analysis data; experienced using growth and yield models like the Forest Vegetation Simulator; who is also conversant with ArcGIS and comfortable leading basic GIS analyses; and a committed and passionate team player.

## **RESPONSIBILITIES & SCOPE**

- Work collaboratively within TNC and the American Forest Foundation's FFCP teams and with other TNC scientists and conservation
  practitioners to develop analytical methods and deliverables that improve our understanding of how forest management impacts standing
  carbon stocks.
- Acquire, process, quality control, and manage spatial and tabular data, coordinating data delivery to and from collaborators.
- Conduct independent analyses of data, interpret results, and synthesize findings.
- Collaboratively draft and edit reports and publications based on the data collected and analyzed.
- Communicate results in a clearly interpretable manned to a mixed audience of foresters, administrators, policy and financial experts, and landowners.

## MINIMUM QUALIFICATIONS

- Master's Degree in forestry, natural resources or a related field and at least 2 years of experience in a professional, scientific or analytical setting or equivalent combination of education and experience.
- Experience working with forest inventory and other vegetation data.
- Experience using the following tools:
  - o R to manipulate and analyze tabular data.
  - o Forest Vegetation simulator for growth and yield modeling.
  - GIS, e.g. ArcGIS or QGIS, to complete basic geospatial analyses.

- Ability to contribute to the development of tools to assist non-scientific staff in understanding the results of detailed scientific investigations.
- Experience with technical writing and delivering information to technical and lay audiences.

### **DESIRED QUALIFICATIONS**

- PhD in natural resources or geospatial science related field and 1 year of experience or equivalent combination of education and experience.
- Experience working with the USDA Forest Service Forest Inventory and Analysis dataset.
- General familiarity with the breadth of forestry practices across the US.
- Collaborative, detail-oriented person with the ability to stay organized and meet deadlines.
- Ability to work in a highly matrixed environment, on a cross-organization team, across multiple geographic regions.
- Ability to think and work creatively, and to proactively identify and solve analytical and methodological problems.
- Strong knowledge of computer technology and common software applications.
- Experience using additional code-driven analytical tools, e.g., Google Earth Engine or Python.
- Familiarity with remotely sensed data, land use and land cover change mapping, and the intersection of tabular and remote sensing datasets.
- Multi-language skills and multi-cultural or cross-cultural experience appreciated.

## **ORGANIZATIONAL COMPETENCIES**

Builds Relationships	Builds productive relationships by interacting with others in ways that enhance mutual trust and commitment.
Collaboration & Teamwork	Works collaboratively with stakeholders across levels, geographies, backgrounds, and cultures to improve decisions, strengthen commitment, and be more effective.
Communicates Authentically	Communicates proactively and in a timely manner to share information, persuade, and influence with the appropriate level of detail, tone, and opportunities for feedback.
Develops Others	Takes ownership to help develop others' skills, behaviors, and mindsets to help them maximize their workplace contributions.
Drives for Results	Sets challenging goals and objectives based on a strong sense of purpose and high-performance standards and steadfastly pushes self and others for tangible results, while ensuring work-life balance.
Leverages Difference	Demonstrates commitment to harnessing the power of differences strategically; consistently sees, learns from, and takes strategic action related to difference; and demonstrates the self-awareness and behaviors to work across differences of identity and power respectfully and effectively with all stakeholder. Actively seeks to build and retain a diverse workforce and fosters an equitable inclusive workplace by drawing upon diverse perspectives.
Systems Leadership	Thinks and acts from a broad perspective with a long-term view and an understanding of 1) the dynamic nature of large-scale challenges and 2) the need for integrating five key practices: skillfully engaging appropriate people; providing a clear process for change; taking a holistic view of situations; focusing on a small number of strategic actions, while learning from and adapting them over time; and being aware of how one's own thinking or patterns of behavior may be limiting change.

This description is not designed to be a complete list of all duties and responsibilities required for this job.

The Nature Conservancy is an Equal Opportunity Employer. Our commitment to diversity includes the recognition that our conservation mission is best advanced by the leadership and contributions of people of all genders with diverse backgrounds, beliefs and cultures. Recruiting and mentoring staff to create an inclusive organization that reflects our global character is a priority and we encourage applicants from all cultures, races, colors, religions, sexes, national or regional origins, ages, disability status, sexual orientations, gender identities, military or veteran status or other status protected by law.