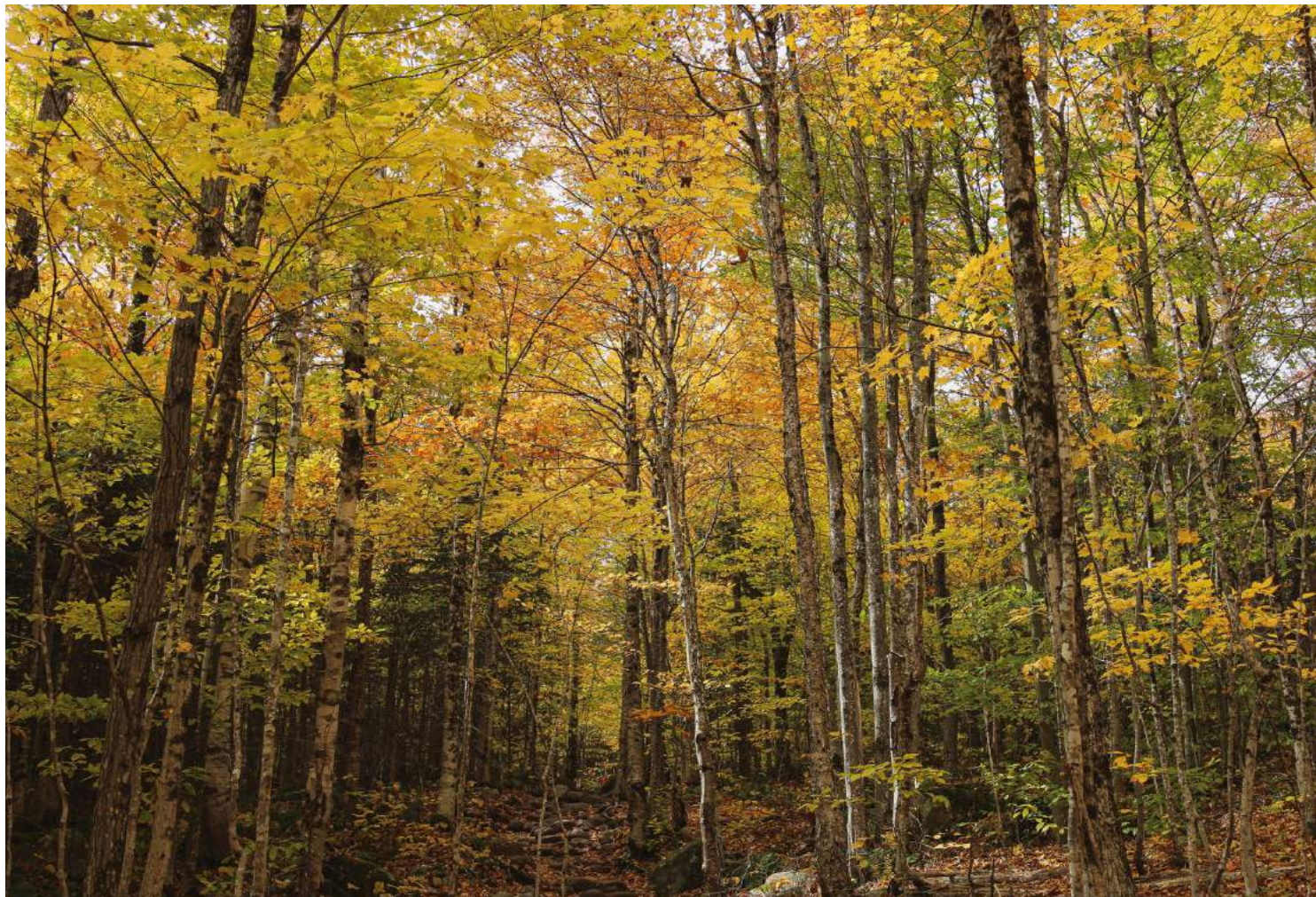**SilviaTerra Blog**   BLOG   SILVIATERRA.COM

CARBON

Democratizing decarbonization in a forest near you

ZACK PARISA
10 MAY 2021 · 3 MIN READ

How an innovative mix of remote sensing, AI analytics and a new marketplace is boosting incentives for owners of even small forest tracts to cut less, and keep more carbon locked up

Could trees turn out to be our best, not-so-secret weapon to fight climate change?

Amidst rising urgency to develop high-tech climate solutions — from direct air capture to geoengineering — trees are nature's killer app, one of the most efficient, lowest-cost ways to remove substantial volumes of carbon. Yet, until now, we haven't found scalable ways to harness their potential.

Steady growth

Our forests hold more promise than you may realize. Letting forests regrow naturally has the potential to absorb up to 8.9 billion metric tons of carbon dioxide each year through 2050, the Nature Conservancy estimates.

This process is already underway. For generations, the US has added more trees than we have harvested, thanks to shifts in farming patterns. Decades of steady surplus mean that today we have

Perhaps more remarkable yet: This growing sink of carbon has flourished with few, if any, special incentives. Landowners tend to steward their forests. Some do so primarily to enjoy all the intangible benefits woodlands give us — from watershed management to biodiversity and visual beauty. And others do so for financial returns, to cultivate timber.

Today, select landowners can already do both: conserve their forests and harvest financial value from the carbon their trees hold. A small number already participate in markets that monetize the long-term value of the carbon locked up in their trees.

But the scale is limited. Conventional methods of measuring, modeling and documenting forests are costly. Typically, only large landholders can justify the huge upfront investment necessary to secure long-term deals.

This leaves most acres of forest out of play, and their carbon offset potential untapped. Roughly half of all forests in the US are owned by small landowners that, until now, have been excluded from these markets.

Democratizing decarbonization

At SilviaTerra, we've spent the last decade bringing to market a suite of innovations that can deliver these kinds of benefits at dramatically lower cost, more quickly, to more people. Broadening access to carbon offsets promises to help not just landowners, but buyers of offsets too and, ultimately, the environment.

At the foundation of our approach is a smarter way to inventory forests. By replacing painstaking on-the-ground surveys with satellite imagery processed by machine learning, we can characterize vast areas of forest with greater accuracy, down to the individual tree.

Yet data about forests, on its own, isn't enough. The critical complement is a dynamic set of technologies that lets us model the probability a forest will be cut. The goal: to identify tracts more likely to be harvested and reward landowners to keep those areas growing.

Combining this forest and market data in our proprietary marketplace, the Natural Capital Exchange, lets us measure and value the carbon sequestered on a given property at costs far lower than conventional methods. We can then bundle and sell those carbon credits to a corporate buyer.

Buyers, in turn, benefit from a deeper, more reliable market. Greater transparency, together with increased certainty of offset quality, can help them plan and execute more ambitious, longer-term climate strategies.

Landowners, meanwhile, are rewarded yearly based on market rates for the value of the annual growth of carbon held by their trees. And if they do harvest some trees that year, they're not paid for those offsets.

By year end, access to this market will be available to every landowner, across every acre in the US.

Cultivating carbon capture

The world needs countless more innovations to bend the arc of emissions towards net-zero and beyond. At SilviaTerra, we're creating a combination of approaches to help forests thrive, and democratize the benefits of carbon-removing incentives.

As warming, drought, pests and wildfire take a growing toll on our forests, the urgency is greater than ever to manage the trees we have and to incent more new growth, through climate-smart strategies.

After all, nature has provided us an amazing technology to remove carbon from the atmosphere. Until now, what's been missing is a better way to measure, track and trade its value.

"Forests Can Absorb Carbon More Quickly than Previously Thought." The Nature Conservancy, 23 Sept. 2020, nature.org/en-us/what-we-do/our-insights/perspectives/climate-potential-natural-regrowth-forests. Accessed 15 Apr. 2021.

Starre Vartan, "More Trees than There Were 100 Years Ago? It's True!" Treehugger, 2015, www.treehugger.com/more-trees-than-there-were-years-ago-its-true-4864115. Accessed 13 Apr. 2021.

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6 May 2021 – 2 min read

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ALL-HANDS

Welcoming Eric and Lillian!

SilviaTerra is growing and our team has just expanded with two additional members - Eric Ripley and Lillian Hogan! Eric Ripley is our Certification Manager. Eric leads the development of

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Our Verified Carbon Standard Concept Note Approval

One significant step closer to full certification Improving forest carbon projects means evolving how we measure Forests are one of the first and best means we have to remove carbon

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