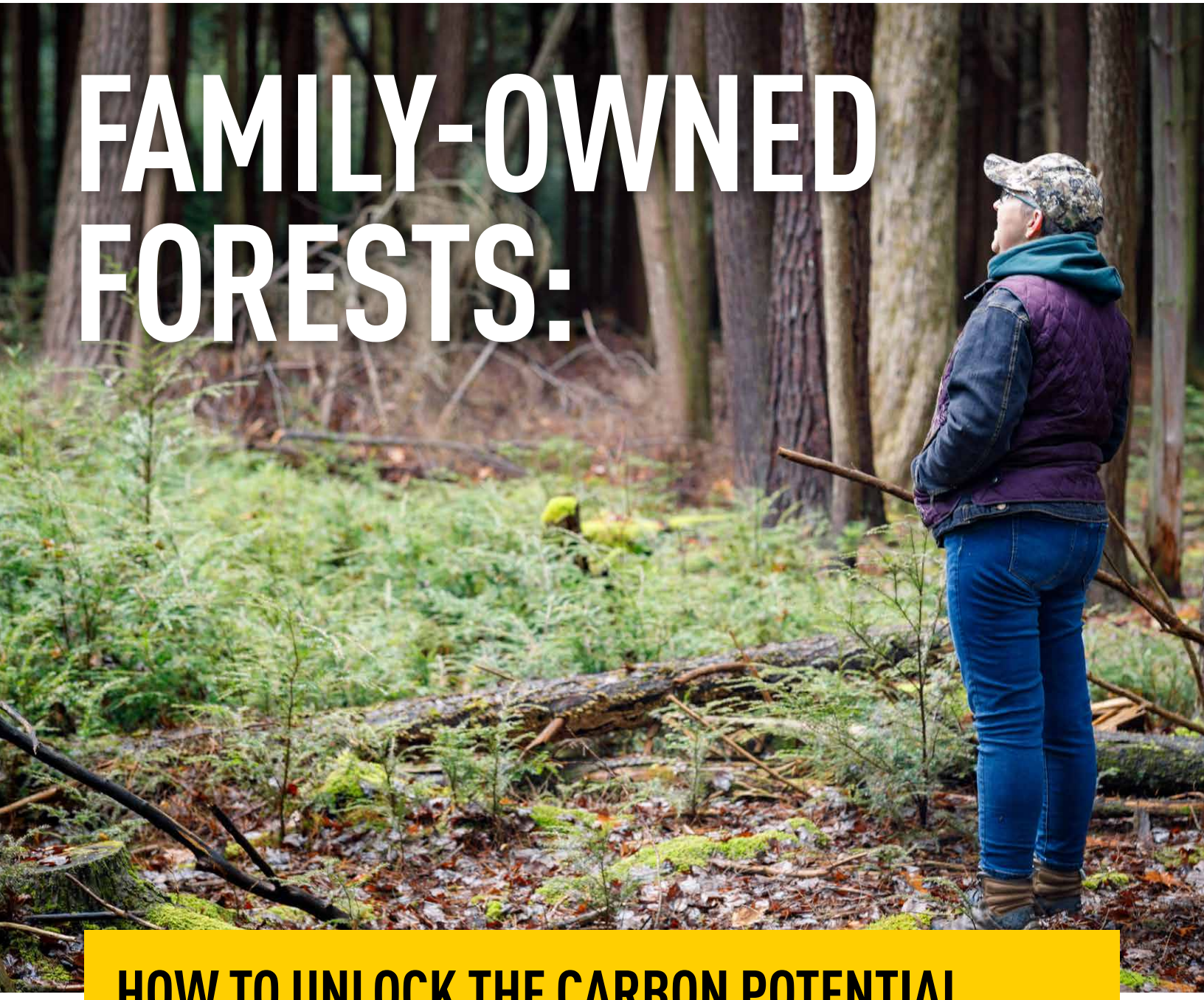


FAMILY-OWNED FORESTS:

HOW TO UNLOCK THE CARBON POTENTIAL IN AMERICA'S BACKYARD

American Forest Foundation

INTRODUCTION

It's undeniable that our environment and climate face extreme challenges that must be addressed. Research from global leaders, such as the Intergovernmental Panel on Climate Change (IPCC) and academic centers across the U.S., makes clear that society must take action to reduce the amount of carbon in the atmosphere in order to avert catastrophic consequences to our communities and resources.

To address these challenges, stakeholders from the public, private, and corporate sectors can all play a role. We must work together to find ways to rapidly decarbonize the global economy, drastically reduce emissions, pull more carbon out of the atmosphere, be more sustainable in our use of finite natural resources, and much more.

This white paper explores how forests, specifically U.S. family-owned forests, can be a significant component of a comprehensive climate strategy.

Detailing America's family-owned forests and their owners, the white paper explores the values and motivations of landowners, their barriers to action, and a crucial mechanism — carbon markets — that can help enable them to take action.

Finally, this white paper describes an innovative new program that is built around the dynamics of small family forests and provides a solution that makes it possible for family-owned forests to contribute to the fight against climate change. The program, the Family Forest Carbon Program, is being developed by the American Forest Foundation (AFF) and The Nature Conservancy (TNC). It brings together family forest owners, private sector companies, and public partners to jointly address climate change.

Family forests have the potential to make a significant contribution to the nation's climate mitigation strategy and to bridge the gap to a low-carbon future. AFF, with its deep knowledge about the needs of family forest owners, details how this can be done to make a significant impact on this major environmental issue.

THE AMERICAN FOREST FOUNDATION

The American Forest Foundation (AFF) is a national conservation organization that focuses on private and family-owned U.S. forests, empowering their owners to protect and improve the clean water, wildlife habitat, carbon storage, and sustainable wood supplies that come from these lands.

AFF partners with companies who use or place a high value on forests for their business, to deliver measurable positive conservation impact. Using its experience and understanding of family forest owners, and its vast network of partners, AFF develops innovative solutions that help companies meet their environmental and sustainability goals, and provide support to family forest owners in caring for their land.

TABLE OF CONTENTS

> THE AMOUNT OF CARBON WE GET OUT OF OUR FORESTS IS DIRECTLY RELATED TO HOW WELL WE STEWARD THEM. IT'S CRUCIAL THAT WE EMPOWER FAMILY FOREST OWNERS TO OVERCOME BARRIERS AND TAKE NEEDED ACTION TO IMPROVE THEIR FORESTS IF WE ARE TO CAPITALIZE ON THIS POTENTIAL TO HELP ADDRESS CLIMATE CHANGE.

– TOM MARTIN, AFF PRESIDENT AND CEO

TOPLINE SUMMARY

Forests provide the most significant pathways among natural climate solutions to addressing climate change.

- Natural climate solutions are a key element of a comprehensive climate strategy, in addition to accelerating the transition to clean energy.
- To tap into the full carbon potential of forests, actions must be taken to keep forests as forests, improve the management of existing forests, reforest (plant trees), and use more forest products which store carbon, and encourage the cycle of investment in more trees.
- Improving forests for carbon also provides other critical benefits such as better wildlife habitat, improved water quality, reduced wildfire risk, and a more profitable wood supply.

Family-owned forests offer the biggest untapped opportunity to sequester more carbon.

- In the United States, families and individuals collectively own the largest portion, 36%[1] of all forests.
- Family forest owners' values align with the needs of our environment and climate. They care about the health of their woods and about seeing their land remain as a forest into the future.
- Family forest owners are not wealthy landowners, but average Americans. Thirty-three percent of family forest owners fall below the U.S. median income.
- While family forest owners have a desire to improve the health of their forest, few are actually doing so. This is due to difficulty finding information, an inability to connect with trusted resources, and most notably, the high cost of forest management and conservation.
- Removing barriers for landowners is critical to maximizing the potential of their forests for carbon sequestration and storage. Providing resources and incentivizing behavior can help.

TOPLINE SUMMARY (CONTINUED)

Carbon markets can empower landowners to take action to improve the health of their forests and sequester more carbon.

- Government-funded assistance, such as conservation programs or tax incentives, are important pieces of the equation needed to help families tackle climate change on their land. But they alone cannot achieve large scale action.
- Markets, specifically, carbon markets, are an effective mechanism to encourage and enable forest owners to take voluntary action to improve their forests and sequester carbon at scale.
- Carbon markets provide needed income to landowners and economic stimulus to rural communities.
- Current carbon programs present challenges for the majority of family forest owners to participate, most notably, complexity and high upfront costs.

The Family Forest Carbon Program, a program developed by the American Forest Foundation and The Nature Conservancy, brings together family forest owners, private sector companies, and public partners to address climate change.

- The Family Forest Carbon Program addresses the barriers landowners face to caring for their land and participating in carbon markets.
- The Family Forest Carbon Program connects family forest owners with trusted information and professionals, and pays them for implementing carbon-positive forest management practices.
- The program is credible, with a methodology created by the TNC science team and pending approval this year by Verra's Verified Carbon Standard (VCS).
- For companies seeking to reduce their supply chain emissions or address residual emissions that can't be eliminated given current technologies, the program provides verified carbon credits, as well as extensive co-benefits such as improved forest health, better wildlife habitat, and economic support for rural landowners.

THE CARBON POTENTIAL IN FORESTS

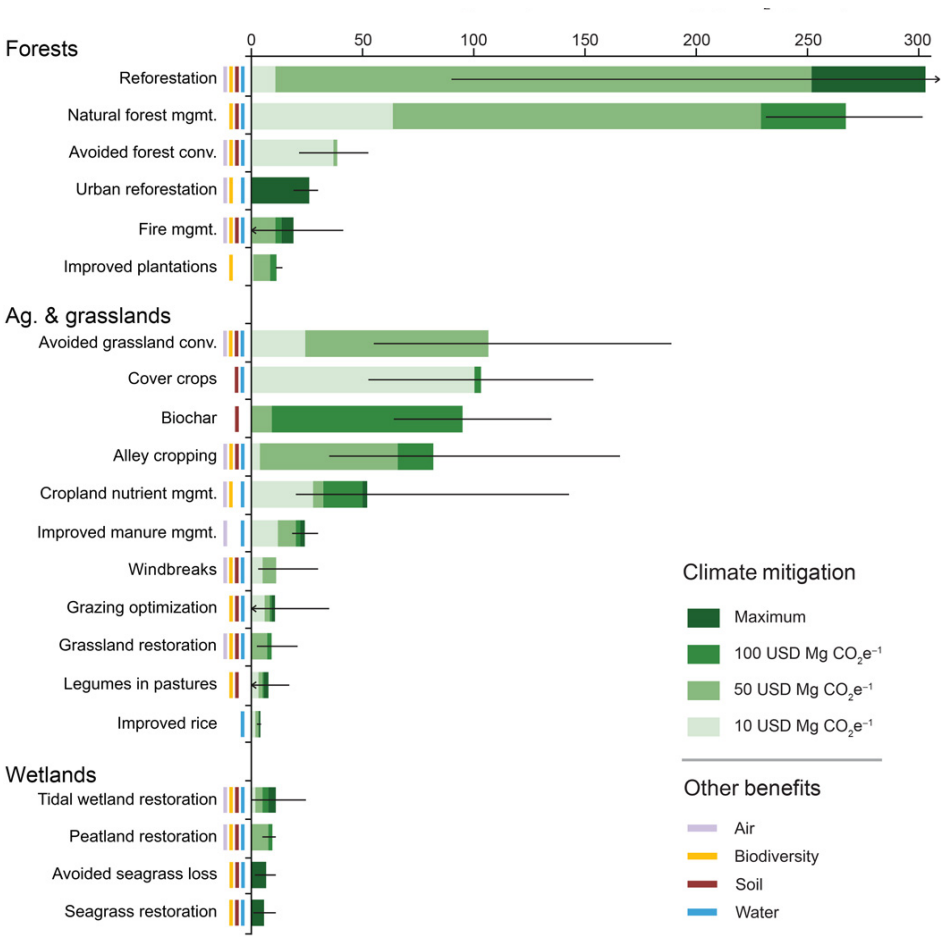
In the U.S., forests occupy more than 760 million acres, or roughly one-third of the land cover.[2] These forests serve as the nation's largest terrestrial carbon sink, currently offsetting 11.3%[3] of our country's annual carbon emissions.

Yet, studies show that these forests could sequester and store significantly more carbon — through natural climate solutions.

Natural climate solutions are actions to conserve, restore, or improve land management to increase carbon storage or to avoid greenhouse gas emissions from forests, agricultural lands, grasslands, and wetlands. Research from TNC shows that natural climate solutions hold the potential to supply 37% of needed climate change mitigation globally through 2030 to keep global temperature increases under the needed two degrees Celsius.[4]

Further research from TNC shows that one of the greatest opportunities to implement these natural climate solutions in the U.S. is through our nation's working forests — specifically through natural or improved management of existing forests, and reforestation.[5] Both strategies increase carbon storage or avoid greenhouse gas emissions in landscapes and wetlands where applied. These strategies also provide other critical benefits, including improved wildlife habitat for many species, clean water protection, reduced wildfire risk, and improved soil health. Further, the use of wood products, in the form of homes, buildings, furniture, and more, will hold carbon over the long term and will encourage the investment in forests.

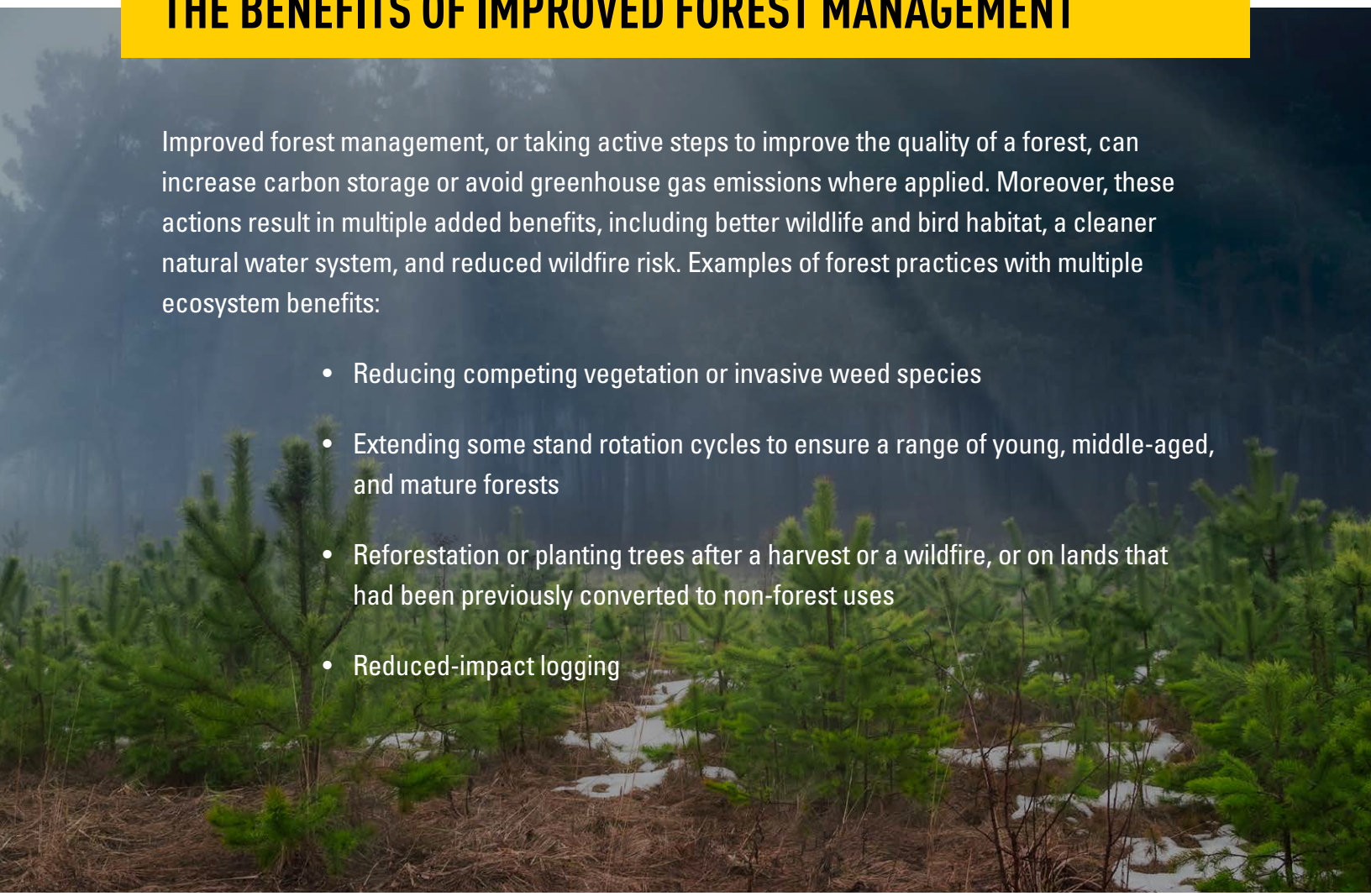
CLIMATE MITIGATION POTENTIAL IN U.S. IN 2025 (Tg CO_2e year)



Climate mitigation potential in the U.S. Reproduced with permission from © PNAS

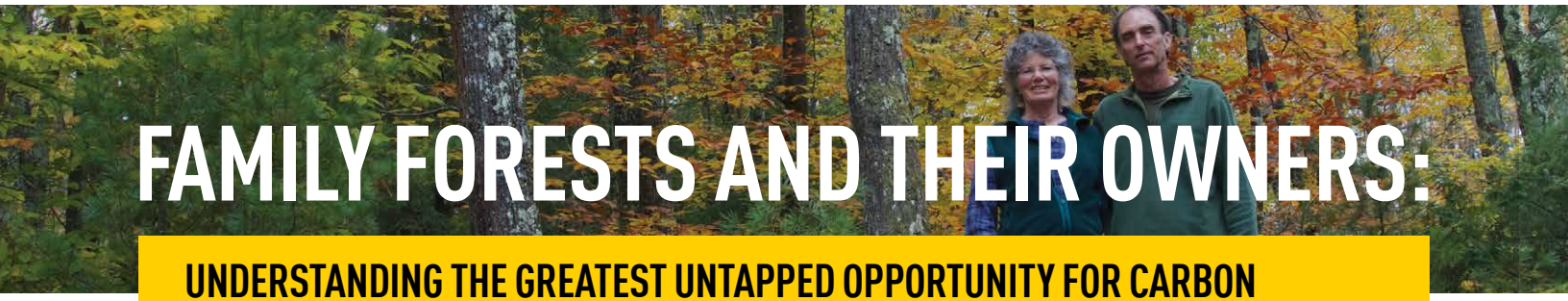
Enacting natural climate solutions through forests is possible today, given the existing science. In addition, these solutions can be implemented at a relatively low cost compared to advanced technologies currently in development, such as carbon engineering. However, despite the potential, natural climate solutions receive less than 1% of current climate financing,[6] leaving opportunity on the table.

THE BENEFITS OF IMPROVED FOREST MANAGEMENT



Improved forest management, or taking active steps to improve the quality of a forest, can increase carbon storage or avoid greenhouse gas emissions where applied. Moreover, these actions result in multiple added benefits, including better wildlife and bird habitat, a cleaner natural water system, and reduced wildfire risk. Examples of forest practices with multiple ecosystem benefits:

- Reducing competing vegetation or invasive weed species
- Extending some stand rotation cycles to ensure a range of young, middle-aged, and mature forests
- Reforestation or planting trees after a harvest or a wildfire, or on lands that had been previously converted to non-forest uses
- Reduced-impact logging



FAMILY FORESTS AND THEIR OWNERS:

UNDERSTANDING THE GREATEST UNTAPPED OPPORTUNITY FOR CARBON SEQUESTRATION IN AMERICA

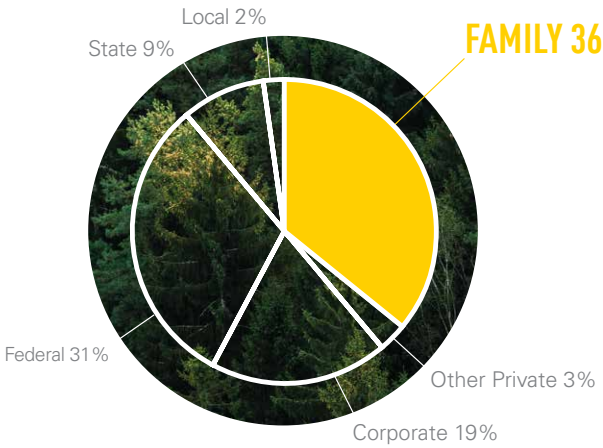
Family-owned forests have the potential to provide the biggest opportunity for increasing carbon sequestration in the U.S.

Families and individuals collectively own more acres of forest across America than any other group. Family forest owners steward 36%[7] of our nation's forests or 290 million acres — the size of California and Texas combined.

Collectively, there are 21 million family forest owners in the U.S.[8] representing 1 in 4 rural Americans.

Family forest ownerships vary in size, from 10 acres to roughly 5,000 acres. But the majority, more than 80%, fall below 1,000 acres, with an average parcel size of 67.2 acres.[9] Family and individual woodland owners can be found in every state, with heavy concentrations in the southern and northeastern regions. In some cases, family ownerships dominate a landscape. For example, in Alabama, family landowners own 58% of the forestland. In Pennsylvania, it's 51%.[10]

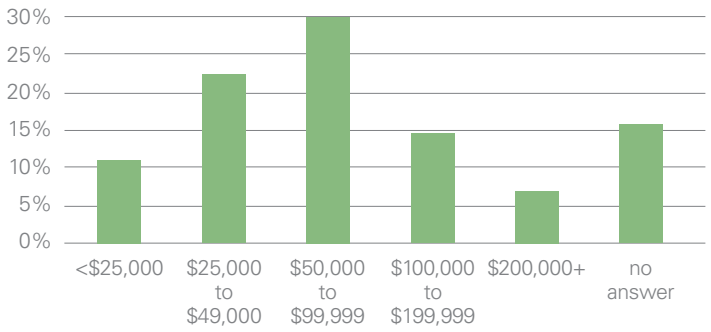
FAMILY FOREST OWNERS OWN THE LARGEST PORTION OF U.S. FOREST



While family and individual forest owners may appear to be "land rich", demographically, they are more aligned with Middle America.

According to the National Woodland Owner Survey (NWOS), produced by the U.S. Forest Service, nearly 2 out of 3, or 63%, of family forest owners in the U.S. have a household income less than $100,000.[11] What's more, 33% of family forestland owners have an annual household income of $50,000 or less, well below the U.S.'s median income, which ranged from $52,250 to $62,000 from 2013 to 2018.[12]

FAMILY FOREST OWNER HOUSEHOLD INCOME



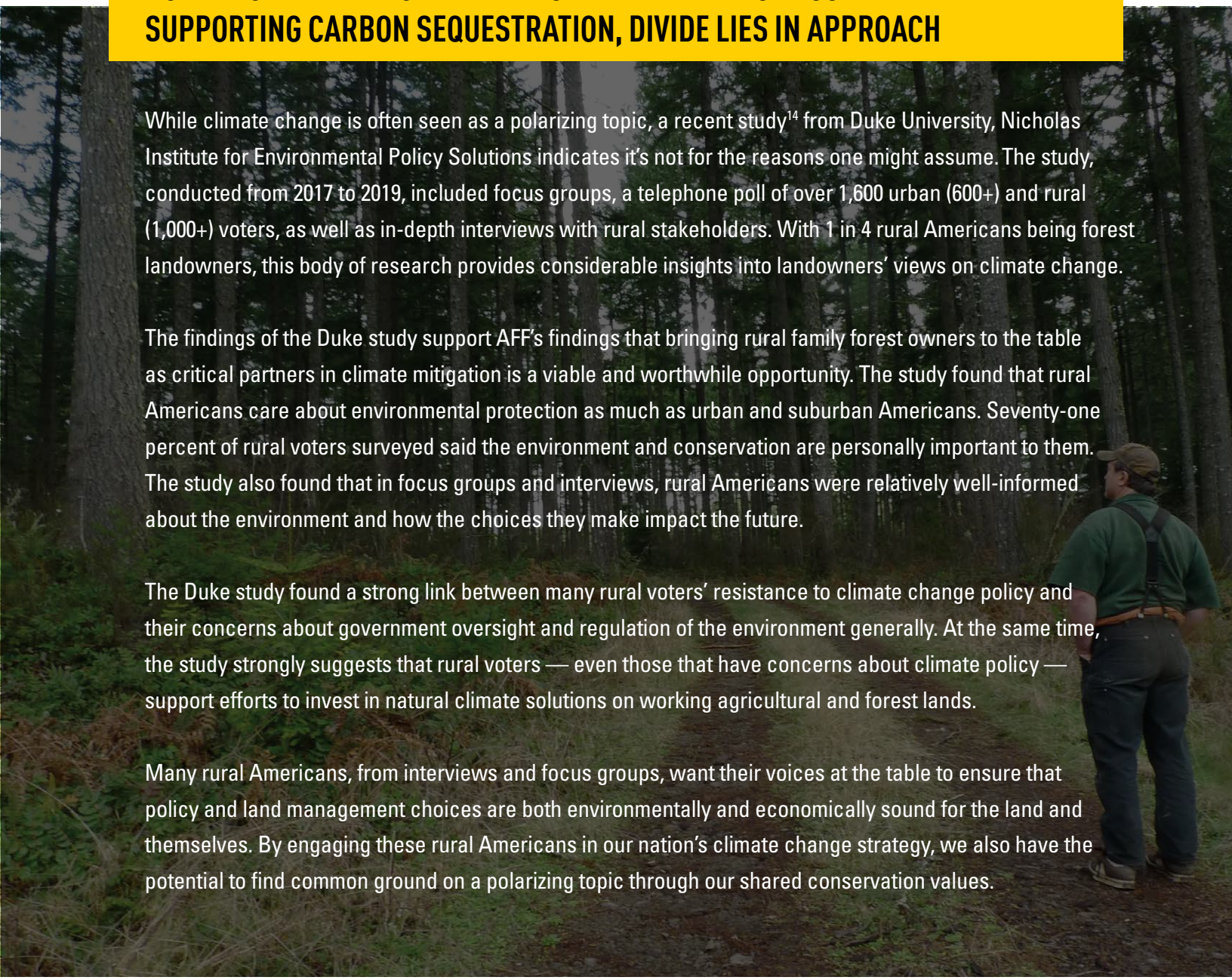
*Data for Forest Owners with 10 to 2,000 Acres in the Continental U.S. Only

Family forest owners care deeply about their forests and want them to be sustained for future generations. In fact, the top three reasons for owning land are: to sustain wildlife and nature, to maintain inherent beauty, and to continue the legacy of their land within their families.[13]

AFF, in its extensive experience, has found it is critical to meet landowners where they are. This means understanding their interests for their land and helping them connect the benefits of improved forest management with their goals. This is more likely to result in meaningful action, which is critical to the improvement of our forests and all they produce.

From 2015 to 2018, AFF, in partnership with outside research firms, conducted a series of attitudinal studies with family forest owners across three regions of the U.S. — Northeast, South, and Midwest. Each study

DUKE STUDY FINDS RURAL AMERICANS SHARE VALUES CONSISTENT WITH SUPPORTING CARBON SEQUESTRATION, DIVIDE LIES IN APPROACH



While climate change is often seen as a polarizing topic, a recent study[14] from Duke University, Nicholas Institute for Environmental Policy Solutions indicates it's not for the reasons one might assume. The study, conducted from 2017 to 2019, included focus groups, a telephone poll of over 1,600 urban (600+) and rural (1,000+) voters, as well as in-depth interviews with rural stakeholders. With 1 in 4 rural Americans being forest landowners, this body of research provides considerable insights into landowners' views on climate change.

The findings of the Duke study support AFF's findings that bringing rural family forest owners to the table as critical partners in climate mitigation is a viable and worthwhile opportunity. The study found that rural Americans care about environmental protection as much as urban and suburban Americans. Seventy-one percent of rural voters surveyed said the environment and conservation are personally important to them. The study also found that in focus groups and interviews, rural Americans were relatively well-informed about the environment and how the choices they make impact the future.

The Duke study found a strong link between many rural voters' resistance to climate change policy and their concerns about government oversight and regulation of the environment generally. At the same time, the study strongly suggests that rural voters — even those that have concerns about climate policy — support efforts to invest in natural climate solutions on working agricultural and forest lands.

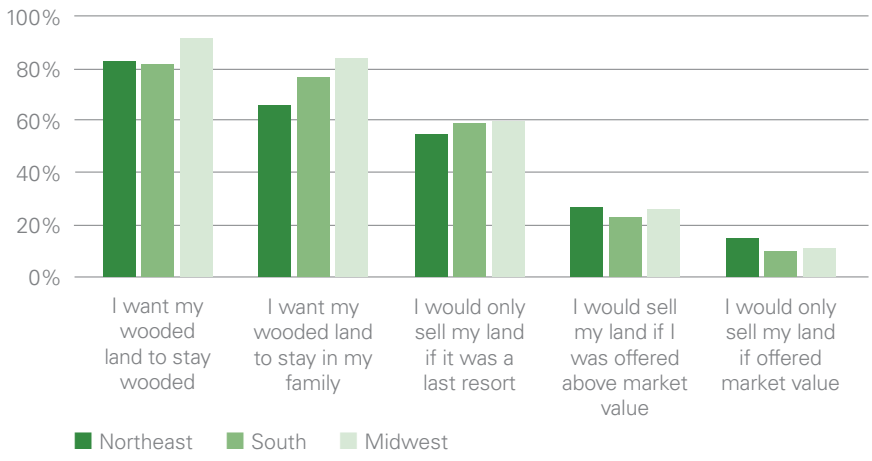
Many rural Americans, from interviews and focus groups, want their voices at the table to ensure that policy and land management choices are both environmentally and economically sound for the land and themselves. By engaging these rural Americans in our nation's climate change strategy, we also have the potential to find common ground on a polarizing topic through our shared conservation values.

received 1,100 to 1,700 responses and focused on key regional issues including biodiversity and wood supply in the South, and wildlife habitat in the Northeast and Midwest. Collectively, the body of work found patterns among landowners. AFF synthesized the information into one study — the "Three Region Summary of Family Forest Owners" to provide insights to better understand landowner motivations, current actions and challenges, and if and how family landowners can help support the carbon-capture and storage needs of our country.[15]

LEAVING A LEGACY FOR THE FUTURE DRIVES FAMILY FOREST OWNERS

Data from AFF's "Three Region Summary of Family Forest Owners" study found that landowners have a strong desire to maintain ownership of their land into the future. Overall, 86% agreed or strongly agreed that they want their lands to stay wooded. Additionally, 76% stated that they want their wooded land to stay in their family. This long-term view of their land is key to keeping forests as forests and avoiding conversion to non-forest uses. It can ensure that forests continue to maintain the wide variety of benefits they produce, including carbon sequestration and storage.

PRIORITIES FOR LANDOWNERS

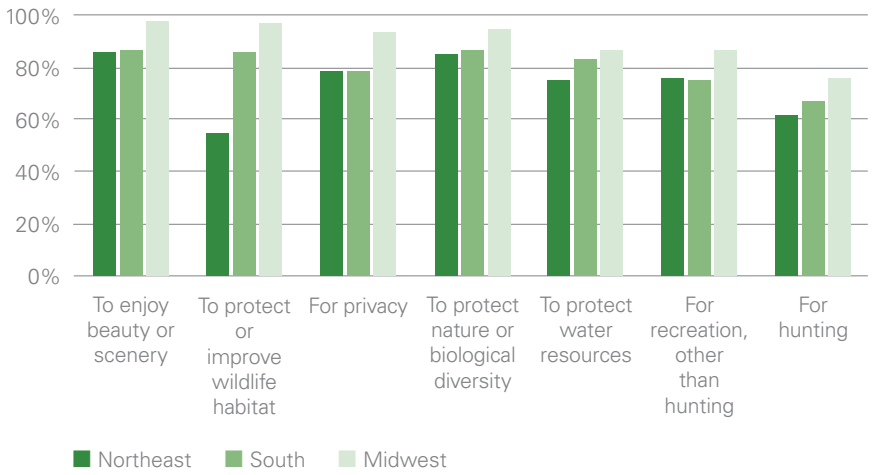


FAMILY FOREST OWNERS ARE INTERESTED IN IMPROVING THE HEALTH OF THEIR FORESTED LAND

Landowners across the U.S. are very interested in enhancing the health of their lands. More than 4 out of 5, or 83%, of landowners surveyed, named forest health priorities such as protecting and improving wildlife habitat, protecting nature and biodiversity, and protecting water resources as primary reasons for ownership.

Acting on these interests can and will result in critical contributions to combating climate change. Many of the tactics intended to achieve better habitat also produce a positive carbon benefit.

REASONS FOR LAND OWNERSHIP



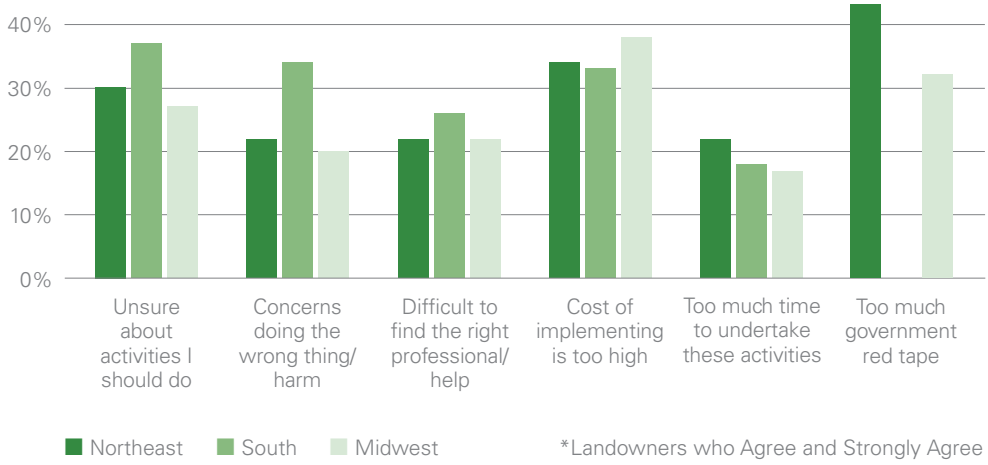
FOREST OWNERS FACE BARRIERS TO ACTION — MOST NOTABLY KNOWLEDGE AND COST

While landowners show an interest in forest enhancement, only 13% of landowners surveyed in AFF's study stated they definitely will conduct forest management practices in the next 12-month period to improve their forests. This represents a noteworthy gap between landowners' goals and their actions on the ground.

This is because most landowners run into challenges. Nearly 1 in 3 landowners surveyed in the "Three Region Summary of Family Forest Owners" study stated they were unsure about what forest management activities they should do, and 1 in 4 stated they were concerned that they would do the wrong thing and harm the land.

AFF has found in its experience working with landowners, that getting started in forest stewardship is a high barrier. While some landowners will find and take courses and seminars offered by university extension offices and state forestry departments, most landowners struggle to find the information and build the knowledge needed to care for their land, or connect with a trusted resource professional who can guide them. In fact, across the U.S. only 1 in 5 landowners have received formal forest management advice[16], and less than 13% of family forest owners have a written forest management plan.[17]

BARRIERS TO MANAGING FOR WILDLIFE*



Working with a forestry or natural resource professional, such as a state service forester or a consulting forester can greatly help landowners make more informed decisions. Foresters help landowners identify the appropriate activities to care for their land and help them achieve their personal long-term land goals. They can also help landowners avoid common, damaging practices such as high-grading.

Even more than knowledge, cost is a substantial barrier. Thirty-five percent of landowners surveyed said the costs of implementing forest management practices were too high.

Specialized equipment, professionals, transportation of material, annual tax payments, and more are needed to sustainably manage forestland. For example, in the Northeast, removing competing vegetation can reach as high as $400 an acre. In the West, a wildfire fuels reduction treatment can cost upwards of $2,500 an acre.[18] For many landowners, these management techniques are not economically feasible.

When a landowner can't afford to implement a practice, it is often left undone. If sustainable forest management is not done over time, this can result in a lower-quality forest, which can jeopardize the existing

baseline benefits that these forests already produce. Moreover, an opportunity is missed to increase the potential of the forest for addressing such environmental challenges as climate change.

Currently a variety of government tools and cost-share programs are available to family forest owners to combat cost challenges. While these programs are important and effective, the needs of the nation's family-owned forests far outstrip the funds available.

Markets for forest products can help. Markets work alongside public programs and funding, leveraging private-side investment to achieve even greater impact.

Markets provide landowners with an avenue to bring in income from their land that can help them offset the cost of needed forest management activities.

Yet, presently, markets for traditional wood products are not always a guarantee, as some markets for wood products have seen significant shifts over the past few decades. Unlocking new or inaccessible markets can help landowners generate the funds needed to cover management costs.

Overall, family forest owners share conservation values that align with the values of healthier forests, which can increase carbon sequestration and storage. These owners face barriers to action, most notably cost. But cost is not an insurmountable barrier. Solutions that make markets a viable option for landowners and encourage sustainable forest management practices are waiting to be unlocked.

> "IT'S A WIN-WIN SITUATION FOR ANYONE WHO HAS A PIECE OF PROPERTY AND IS PLANNING ON KEEPING IT IN THE FAMILY."
>
> – TIM LEIBY, OWNER OF 95 ACRES OF FORESTLAND IN WAYNE, PA., AND IS AMONG THE FIRST PARTICIPANTS IN THE FAMILY FOREST CARBON PROGRAM.

CARBON MARKETS FOR FAMILY FOREST OWNERS

A MECHANISM FOR UNLOCKING CARBON AND SUPPORTING FAMILY FOREST OWNERS

Enabling new and existing markets has incredible potential for helping family-owned forests produce critical benefits from their lands. Carbon markets, in particular, must be unlocked in order to capitalize on the climate-mitigation value of family-owned forests.

For family landowners, carbon markets signal the value in keeping their forests as forests, and in engaging in improved forest management that creates a healthier, more productive forest.

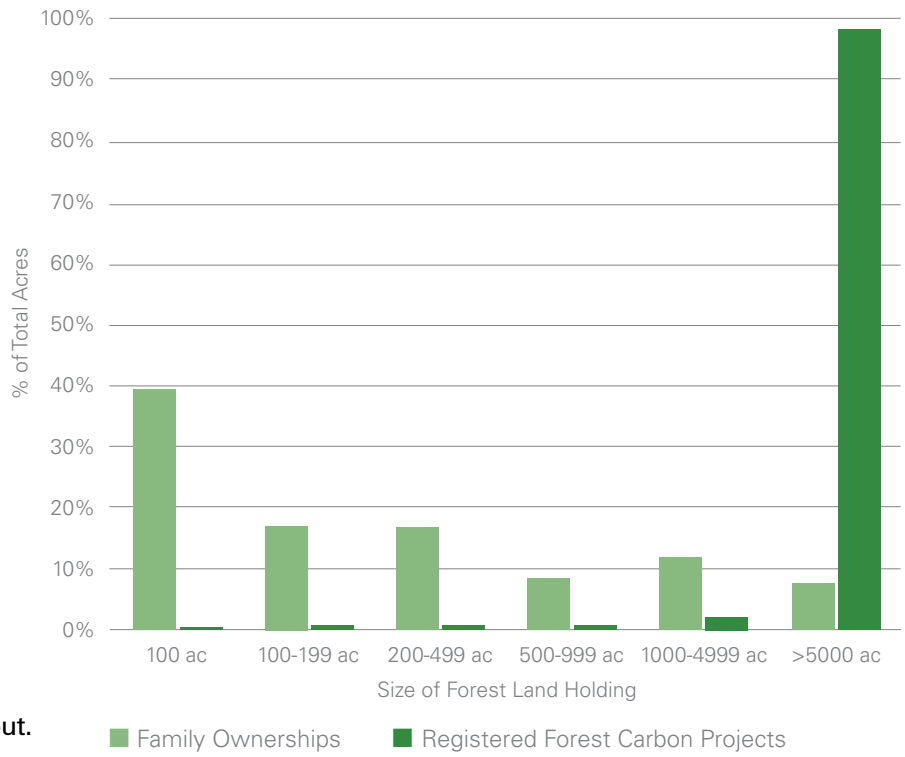
They offer landowners a voluntary option for action, rather than being regulated — which, as reported by the Duke study, can turn off landowners or be viewed negatively. Rather voluntary carbon markets complement existing governmental tools and incentives, and leverage private-side investments in natural climate solutions needed to scale improved forest management.

Most notably, carbon markets can help landowners overcome individual cost barriers. Bringing in income from their land helps family forest owners afford to conduct regular upkeep, pay their taxes, and implement improved forest management practices. In addition, markets for wood products or environmental services aren't just important for landowners, they are important for rural communities. AFF estimates that the average family forest owner contracts with up to 15 people in their communities each year, such as foresters, loggers, contractors, and more.[19]

CURRENT CARBON MARKET PROJECTS PRESENT CHALLENGES THAT PREVENT FOREST OWNERS OF SMALL PARCELS FROM PARTICIPATING

Yet when it comes to current carbon market projects, nearly all family forest ownerships are currently left out.

CARBON MARKET PROJECTS VS ACREAGE IN THE U.S.



More than 98% of the forest carbon projects in the U.S. have been developed on properties exceeding 5,000 acres in size — which account for a very small portion of the forestland in the U.S.[20] Less than 1% of acres in existing carbon projects are on acreages between 20 and 1,000 acres[21] — the size range of the majority of family-owned properties in the U.S.

There are many reasons for this lack of participation in carbon markets by owners of small land holdings, including:

- **Lack of knowledge and information about carbon markets** —Carbon markets are relatively new and information about these markets is not readily available. Finding a trusted source for information or guidance can be difficult.

- **Program complexities** — Traditional forest carbon programs are complex, requiring specialized knowledge and experience to participate over the required project term.

- **Lengthy contract terms** — To account for permanence, or the assurance that carbon is permanently stored over the long-term, contract terms for carbon programs range from 30 to over 100 years in length. For most landowners, terms that last for multiple generations are not attractive.

- **High upfront costs** — There are significant upfront costs to develop a forest carbon project on an individual's property, including a detailed forest inventory, comprehensive project development documentation, and a third-party validation/verification process, all requiring professionals with specialized knowledge and experience. Costs can easily exceed $100,000 before a landowner is issued carbon credits that may be sold, a process that may take 12 to 18 months depending on the carbon program.

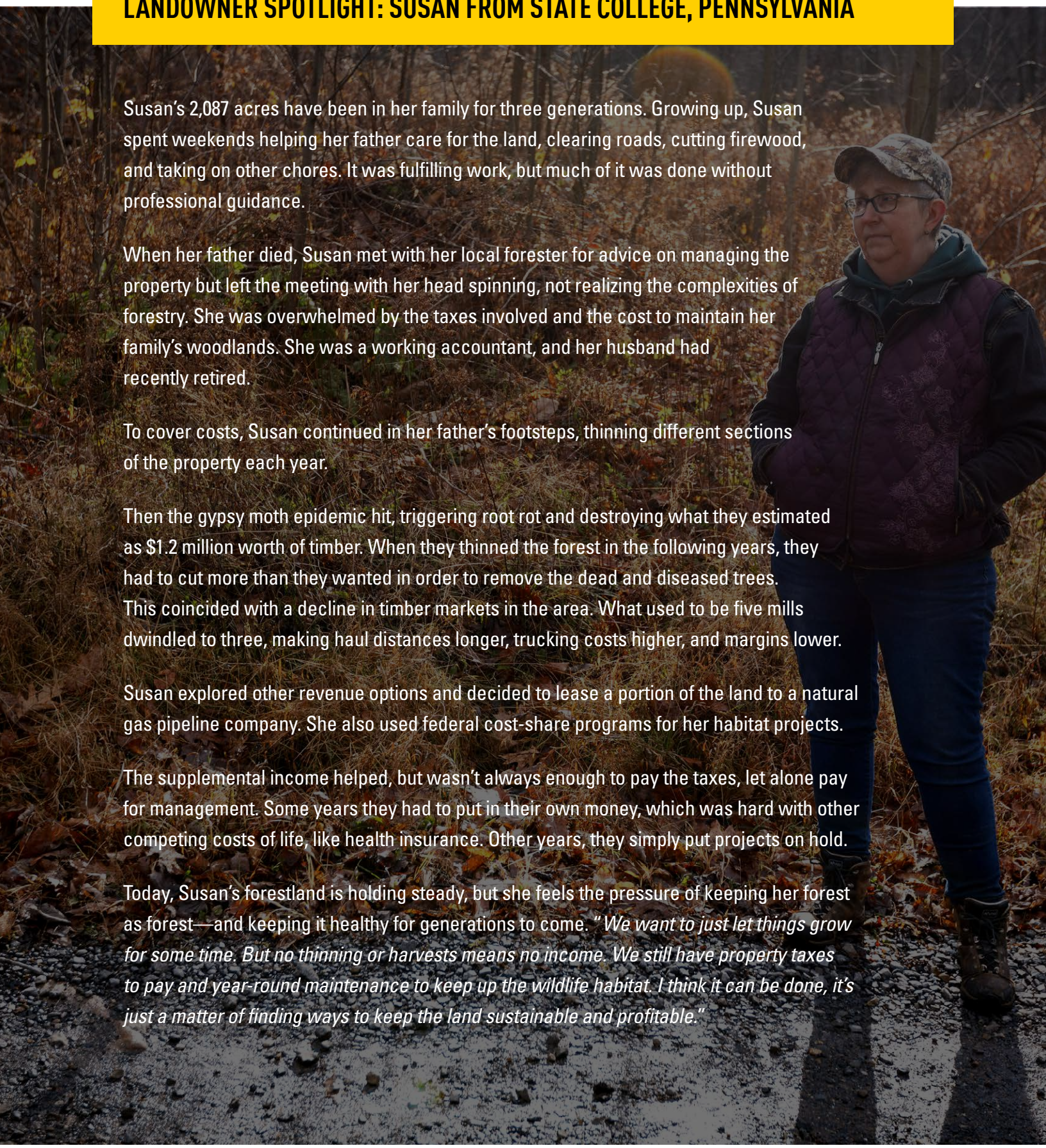
- **Loss of flexibility** — Traditional forest carbon programs often place constraints on forest management activities, complicate the ability to transfer the property to one or more heirs, and may impact the land value if the property is sold to a party not interested in continuing the forest carbon project.

- **Measurement of Carbon** — In traditional carbon markets, the landowner is responsible for (or paying for) the periodic monitoring and verification of the carbon their forest holds over the length of the project, and submitting regular written reports to a carbon registry, another large price tag.

Despite these challenges, carbon markets can financially incentivize landowners to contribute to climate mitigation through managing their forests in ways that sequester and store more carbon over time.

A workable solution to address the above barriers to landowner participation in carbon markets can help unlock the potential for climate mitigation from family forestland across the country.

LANDOWNER SPOTLIGHT: SUSAN FROM STATE COLLEGE, PENNSYLVANIA



Susan's 2,087 acres have been in her family for three generations. Growing up, Susan spent weekends helping her father care for the land, clearing roads, cutting firewood, and taking on other chores. It was fulfilling work, but much of it was done without professional guidance.

When her father died, Susan met with her local forester for advice on managing the property but left the meeting with her head spinning, not realizing the complexities of forestry. She was overwhelmed by the taxes involved and the cost to maintain her family's woodlands. She was a working accountant, and her husband had recently retired.

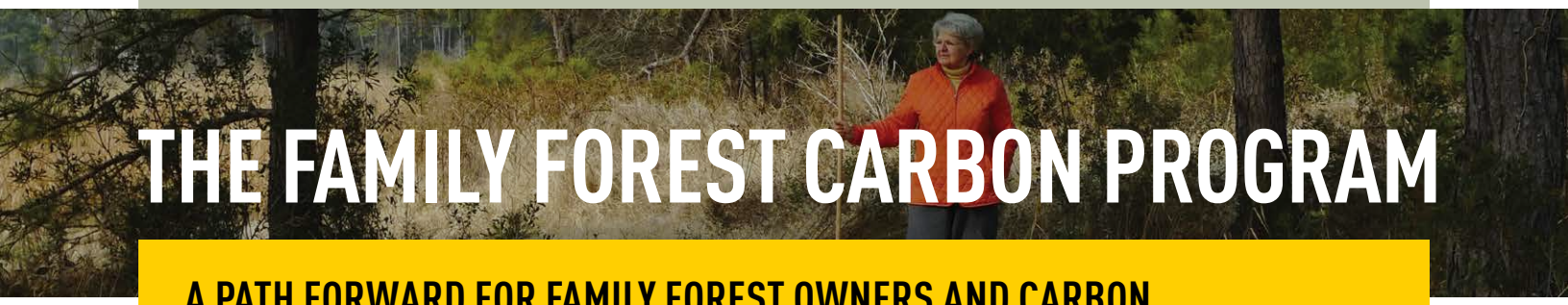
To cover costs, Susan continued in her father's footsteps, thinning different sections of the property each year.

Then the gypsy moth epidemic hit, triggering root rot and destroying what they estimated as $1.2 million worth of timber. When they thinned the forest in the following years, they had to cut more than they wanted in order to remove the dead and diseased trees. This coincided with a decline in timber markets in the area. What used to be five mills dwindled to three, making haul distances longer, trucking costs higher, and margins lower.

Susan explored other revenue options and decided to lease a portion of the land to a natural gas pipeline company. She also used federal cost-share programs for her habitat projects.

The supplemental income helped, but wasn't always enough to pay the taxes, let alone pay for management. Some years they had to put in their own money, which was hard with other competing costs of life, like health insurance. Other years, they simply put projects on hold.

Today, Susan's forestland is holding steady, but she feels the pressure of keeping her forest as forest—and keeping it healthy for generations to come. "*We want to just let things grow for some time. But no thinning or harvests means no income. We still have property taxes to pay and year-round maintenance to keep up the wildlife habitat. I think it can be done, it's just a matter of finding ways to keep the land sustainable and profitable.*"



THE FAMILY FOREST CARBON PROGRAM

A PATH FORWARD FOR FAMILY FOREST OWNERS AND CARBON

Taking into consideration the opportunity in our U.S. forests to address climate change, AFF and TNC have launched the Family Forest Carbon Program, a solution to aligning the needs and values of family forest owners and carbon reduction. The Family Forest Carbon Program brings together family forest owners, private sector companies, and federal partners to address climate change together, by enabling small forest holdings to enter and benefit from carbon markets at scale for the first time.

Different than traditional carbon programs, the Family Forest Carbon Program addresses the barriers owners of small forest holdings face both in taking active steps to care for their forests and in accessing carbon markets, opening an avenue for these individuals to contribute to climate mitigation.

BARRIERS TO TRADITIONAL CARBON MARKETS	FAMILY FOREST CARBON PROGRAM SOLUTIONS
INFORMATION – Landowner faces a lack of information about carbon-friendly forest practices and carbon markets.	The program offers landowners access to information about forest practices that can help mitigate climate change from experienced and trusted forestry professionals associated with the program.
COMPLEXITY – Complex program processes and rules that require specialized knowledge and experience to develop and monitor a forest carbon project.	Simpler program processes and rules that are designed specifically for family forestland owners, guided by recommended resource professionals.
CONTRACT LENGTH – Landowner must commit to longterm contract, generally 40 years to more than 100 years to address permanence.	Landowner's commitment is a more manageable 10 to 20-year contract length. Permanence is addressed at the landscape level through aggregation of many landowners across a region.
COST – Landowner must pay the costs to develop, verify, and register carbon credits. In addition, there is a cost to market and sell carbon credits into the marketplace.	The program pays the upfront costs to identify and implement carbon-friendly forest management practices that sequester and store carbon.
LOSS OF FLEXIBILITY – Due to long contract terms and program complexity.	More manageable contract terms and program can easily be transferred to heirs or others.
MONITORING AND REPORTING – Landowner is responsible for monitoring and submitting regular written reports to a carbon registry, as well as paying for re-inventory and verification costs over the project term.	The program monitors practice implementation on every property, and then monitors carbon values at the landscape level using statistical random sampling.

The Family Forest Carbon Program is a performance-based approach, providing upfront incentive payments to forest landowners to implement specific sustainable forestry practices that increase sequestration and storage of carbon. The forest management practices landowners will implement are geographically specific to the forest types in their given area, providing additional improved forest health and wildlife habitat benefits, as well as incentives to keep the forest as a forest. Additionally, the program enables family landowners to transition to long-term, sustainable management by connecting them with technical assistance from professionals who

put together a forest management plan and provide recommendations to improve forest health. Altogether the program reduces the vast majority of costs to landowners allowing more family forest owners to contribute to mitigating climate change through carbon markets.

DEVELOPING A NEW METHODOLOGY FOCUSED ON CREDIBILITY AND RIGOR

To account for the unique characteristics of forest owners of small parcels, the Family Forest Carbon Program, led by the science team at TNC, has created a new methodology to measure carbon. This new methodology is a first of its kind, designed to detect carbon benefits from any type of forestry practice. This incentivizes the program to continue to innovate to find the most cutting-edge sustainable forestry practices that will produce the greatest carbon benefit even as forests come under new pressures from climate change in coming decades.

> "THE SCIENCE SHOWS THERE'S A REAL OPPORTUNITY TO WORK WITH FAMILY FOREST OWNERS TO FIGHT CLIMATE CHANGE AND PROVIDE SUSTAINABLE TIMBER FOR THE FUTURE. COLLABORATING WITH AFF, WE FEEL WE HAVE FOUND A SOLUTION THAT IS A WIN-WIN FOR BOTH LANDOWNERS AND CONSERVATION."
>
> – PETER ELLIS, LEAD OF TNC'S GLOBAL NATURAL CLIMATE SOLUTIONS SCIENCE TEAM

While the program is being implemented at a landscape level to reduce costs for landowners, it will ensure accurate carbon measurements for buyers and other stakeholders through a series of permanent measurement sites on a sample of properties. These properties will be compared to equivalent forest carbon measurements undertaken by the U.S. Forest Service's Forest Inventory and Analysis (FIA) National Program. This means the climate benefits of the forests in the Family Forest Carbon Program will be measured against other forests in the region that aren't part of the program, avoiding the pitfalls that can come from measuring climate benefits against a modeled baseline as seen in traditional carbon methodologies.

While the methodology will be the foundation for the Family Forest Carbon Program, this new methodology could be applied in any of the 112 countries[22] with a national forest inventory system.

To ensure efficiency, the program has been working with Verra, the nonprofit organization that oversees the Verified Carbon Standard (VCS), to review and validate this new approach and methodology. The methodology is pending approved use under the VCS at the end of 2020. Each carbon credit produced under the VCS will be third party verified by outside auditors under the VCS system, ensuring buyers are receiving a quality credit.

PENNSYLVANIA PILOT PROJECT

The Family Forest Carbon Program is being tested with a goal to recruit and sign contracts with approximately 100 landowners owning 9,000 acres in Pennsylvania. Eligible landowners will work with professional foresters to implement one or more practices designed to improve forest health and increase carbon sequestration. Specifically, landowners can participate in two geographically specific practices:

- **Growing Mature Forests** — The Growing Mature Forests practice promotes the growth of larger, higher quality trees by incentivizing the highest level of sustainable forestry practices over a 20 year contract period, in line with the landowner's management plan.
- **Enhancing Future Forests** — The Enhancing Future Forests practice promotes robust successful regeneration of new forests by having the landowner reduce competing vegetation following or preceding a regeneration harvest. This will allow quality trees to have the space, sunlight, and water needed to grow.

KEY BENEFITS OF THE FAMILY FOREST CARBON PROGRAM FOR PUBLIC LEADERS:

The Family Forest Carbon Program is valuable to policymakers and public leaders at the federal and state level, providing:

- **ECONOMIC SUPPORT FOR RURAL COMMUNITIES** with a new avenue for landowners to generate income from their land.
- **A PLATFORM TO REACH CRITICAL CLIMATE GOALS** for carbon sequestration through the collaboration with family forest landowners.
- **IMPROVED FOREST HEALTH,** benefiting wildlife habitat, biodiversity, water quality, and ecosystem resiliency.
- **A PROGRAM THAT LEVERAGES PRIVATE-SIDE INVESTMENT,** helping expand public dollars in order to reach scale.

For more information on how state and federal officials can partner or support the Family Forest Carbon Program, please contact Rita Hite, EVP of External Relations and Policy at AFF at **rhite@forestfoundation.org**.

OPPORTUNITIES FOR CORPORATE PARTNERSHIP:

INVEST IN THE FAMILY FOREST CARBON PROGRAM

Beyond addressing the challenges family landowners face in accessing carbon markets, the Family Forest Carbon Program provides companies an avenue to meet their climate objectives. The program will produce carbon credits verified under Verra's Verified Carbon Standard (VCS). These credits can be purchased by companies in order to address residual emissions that cannot be cost-effectively reduced or eliminated at the current time.

The Family Forest Carbon Program is looking for corporate partners to commit to long-term offtake agreements, in which companies pledge to buy a set volume of credits at a defined price point over a 3 to 10 year period.

Partnership with the Family Forest Carbon Program provides corporations:

- **VERIFIED CARBON CREDITS,** generated by family forest owners' actions on their land, and third-party verified under Verra's Verified Carbon Standard (VCS).
- **CHARISMATIC CARBON** that supports America's rural landowners, thanks to a company's climate investment.
- **EXTENSIVE FOREST CO-BENEFITS,** including improved forest health and enhanced wildlife habitat.
- **RELIABLE ACCESS TO REASONABLY-PRICED CARBON CREDITS,** allowing companies to mitigate the impacts of rapidly rising carbon prices.
- **TAKE CLIMATE ACTION NOW, PAY LATER APPROACH** through offtake agreements in which companies pay only on credit delivery.
- **INCREASED SUPPLY CHAIN RESILIENCY** for companies that source paper, fiber-based packaging or other wood products from North America.

For more information on how you can partner with the Family Forest Carbon Program and secure verified carbon credits, please contact Nathan Truitt, VP of Strategic Partnerships at AFF at **ntruitt@forestfoundation.org**.

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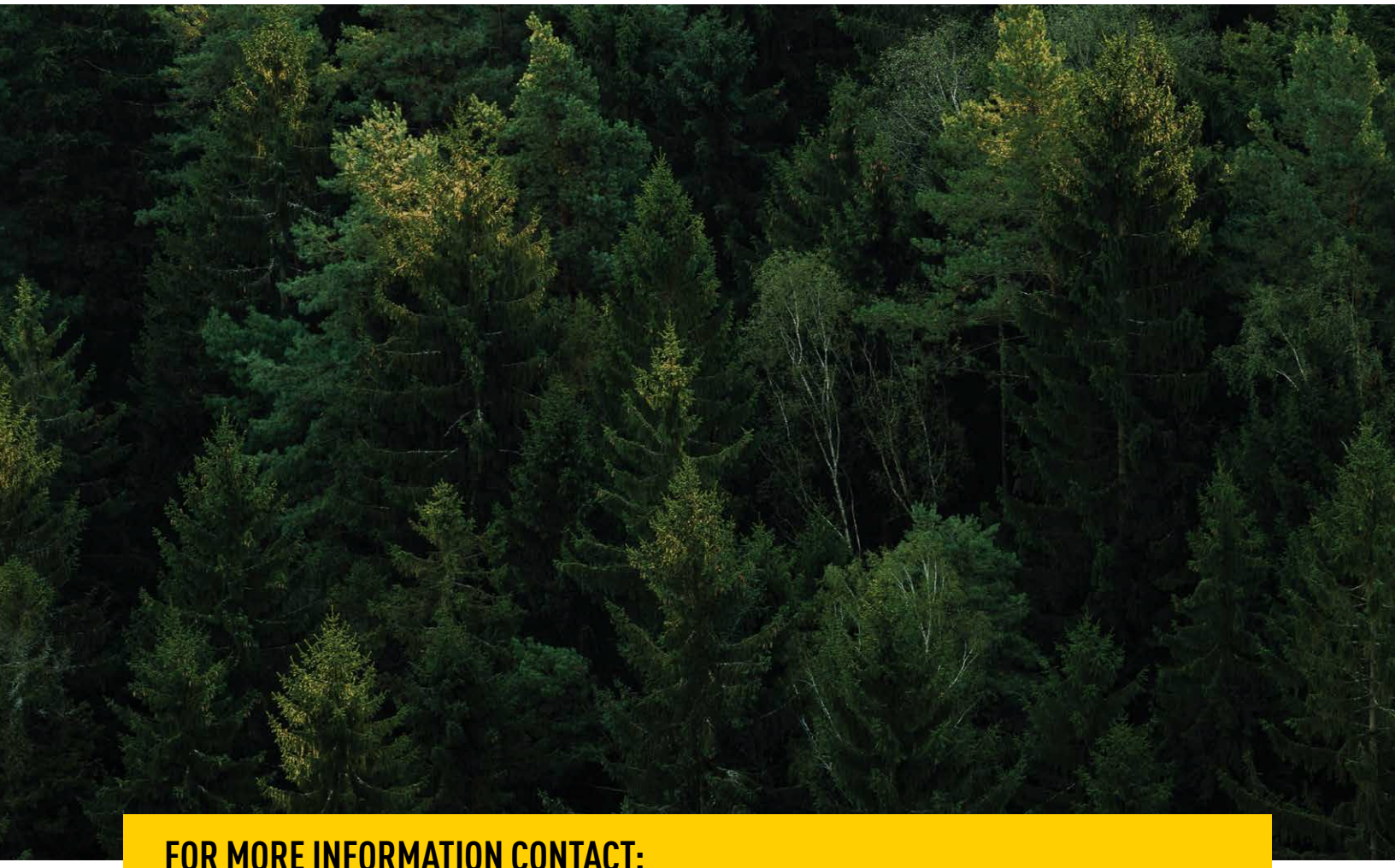

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