

# INTO THE WOODS

NEW ENGLAND FORESTRY FOUNDATION | SPRING 2021

## Stewarding a Landscape

PAGE 3

PTIF RECEIVES A  
NEW DONATION

PAGE 7

ARNOLD FAMILY FOREST

PAGE 9

ENVIRONMENTAL CHILDREN'S  
BOOKS FOR CHALLENGING TIMES

PAGE 11

SPOTTING SPRING EPHEMERALS

PAGE 13



NEW ENGLAND  
**FORESTRY**  
FOUNDATION

# Board of Directors

## PRESIDENT

Philip Y. DeNormandie

## VICE-PRESIDENT

Frederick J. (Rick) Weyerhaeuser

## TREASURER

Robert W. Ackerman

## CLERK

Anne Stetson

## ADDITIONAL DIRECTORS

Laurence (Larry) Band

Whitney (Whit) Beals

Christopher (Chris) di Bonaventura

Cameron Brandt

Andrea (Andi) Colnes

Frederick (Rick) Findlay

Michael Lehner

G. Montgomery (Monty) Lovejoy III

David (Tracy) Moskovitz

Robert (Bob) Perschel

Todd Rodman

John van der Stricht

Byron Stutzman

## HONORARY BOARD MEMBER

Bayard Henry



**NEW ENGLAND  
FORESTRY  
FOUNDATION**

32 Foster Street | P.O. Box 1346

Littleton, MA 01460

978.952.6856 | [newenglandforestry.org](http://newenglandforestry.org)

This publication is printed on Monadnock Astrolite PC 100, a third-party certified, 100% post-consumer recycled paper, produced using 100% clean, renewable electric power. Astrolite PC 100 is an environmentally responsible choice.

Many thanks to Monadnock Paper Mills of Bennington, NH for their support in this endeavor.

*Exemplary Forestry* and *Exemplary Forest Management* are trademarks of New England Forestry Foundation, Inc.

## Dear Members and Friends,

I was there when the tree fell. It is my claim to fame in the small and esoteric world of people who manage forests. It's my go-to tale whenever foresters gather around campfires or at conferences, reunions, and yes, Zoom calls. What reminded me of this story was the great news that the Dr. David M. Smith woodlot in Leverett, Massachusetts, has been enrolled in NEFF's Pooled Timber Income Fund (PTIF) by Dave's daughters. Dave, who passed away in 2009, was my mentor and the world's foremost authority on silviculture—the art and science of growing forests.

From his tenured position at the Yale School of Forestry and Environmental Studies, Dave wrote THE textbook on how to manage forests. Dave had a very wry, dry, reserved and piercing sense of humor and a brilliant, inquisitive mind. His office in Sage Hall was always a scene of ordered disarray. But there was always a method below the surface. I remember going into Dave's office with the most obscure question on pruning pine in New Zealand. He squinted at me for a moment, pursed his lips, scratched his chin and then walked over to a stack of papers that must have been three feet high. He reached into the middle and pulled out the precise monograph I needed. To this day I can't say if I am more amazed that he knew exactly where it was, or that he was able to pull it from the stack without it toppling over.

Dave was often imitated by his students and much loved. The day when the tree fell occurred after I graduated when Dave and his forestry class were visiting one of the private woodlots I was managing. It was a cloudless, beautiful spring day without the hint of a breeze. We were all circled around listening to Dave's instructions on how to nurture this kind of forest. We were leaning on his every word because—after all—this was the GUY WHO WROTE THE TEXTBOOK; he probably knew more about forestry than anyone on the planet. Then suddenly we heard a groan and a creak. About 150 feet away, a mature, totally healthy looking oak tree shuddered once, shaking its new leaves. Then it shuddered again, swayed, teetered on its base and slammed to the ground. We all stared stupefied in the direction of the crash, and then—all in unison—we turned to look at Dave. He squinted his eyes, pursed his lips, scratched his chin and then in his droll, understated manner said, "I've always known that happens, but I've never seen it."

We had just witnessed the process of life and growth and decay and mortality played out in front of us. The textbook says trees die of natural causes all the time, but how often would we get to see it actually happen?

You had to be there. Maybe you have to be a forester to totally appreciate the moment. It's kind of like how I feel now. I try to explain to my NEFF colleagues: Do you know what it means to have David M. Smith's first woodlot as one of our forests? It's as if we had one of Michelangelo's first sculptures in our care.

Dave's lessons on managing New England forests reverberate through NEFF's work. It is the basis for why we can say with confidence that Exemplary Forestry™ can make a huge difference in mitigating climate change. One day, perhaps on a bright day this spring or summer, we can all gather on the David M. Smith Forest and wait quietly for nature to reveal itself.

Robert Perschel  
Executive Director



3

STEWARDING A LANDSCAPE

7

PTIF RECEIVES NEW DONATION

9

ARNOLD FAMILY FOREST

11

ENVIRONMENTAL CHILDREN'S BOOKS  
FOR CHALLENGING TIMES

13

SPOTTING SPRING EPHEMERALS



Mandy McGowan, Bill Reynolds and their wedding party made their way to the ceremony on a pontoon boat. Photo by Rory McCann Photography.

## News and Notes

New England Forestry Foundation (NEFF) is delighted to announce the marriage of Mandy McGowan and Bill Reynolds, great grandson of NEFF founder Harris Reynolds, at Chamberlain Reynolds Memorial Forest on Saturday, Sept. 26, 2020. The wedding party approached Chamberlain Reynolds by boat and then walked into the woods for the ceremony, which was held at the Wister 1 campsite.

Mr. John C. Wister donated Chamberlain Reynolds Memorial Forest to NEFF in 1953, and the property is named for Allen Chamberlain and Harris Reynolds, Wister's friends as well as key figures in NEFF's history.



Harris Reynolds' direct descendants and their partners who attended the wedding, from left to right: Meredith Mommers (wife of Chris Reynolds), Chris Reynolds (great-grandson), Jeff Reynolds (great-grandson), Maddie Reynolds (great-granddaughter), Mandy McGowan (wife of Bill Reynolds), Bill Reynolds (great-grandson), Jan Reynolds (wife of Bob Reynolds), Bob Reynolds (grandson), Donald Reynolds (grandson), Lee Reynolds (wife of Bruce Reynolds), and Bruce Reynolds (grandson). Photo by Rory McCann Photography.



# STEWARDING A LANDSCAPE

Cranberry Cove on Upper Richardson Lake, a part of the Pingree easement.  
Photo by Ben Pearson, courtesy of Seven Islands Land Company.

**WRITING BY** Andrew Bentley, NEFF Conservation Easement Manager and Tinsley Hunsdorfer, NEFF Communications Manager

Learn about the custom New England Forestry Foundation (NEFF) monitoring system—complete with aerial photography missions and bushwhacking excursions—that allows us to steward more than a million Maine acres protected by NEFF conservation easements, and meet the people and partners who not only make this fascinating process work, but also share our commitment to these vital and vast forestlands.

Of the many remarkable things NEFF has accomplished in its 76 years, the easiest to quantify is also potentially the most staggering: NEFF has permanently protected more than 1.1 million acres of forest from development, including one out of every three acres of forestland protected in New England since 1999. Taken together, this conserved land is nearly one and a half times the size of Rhode Island, and in Maine, NEFF's holdings comprise about one-fifth of all conserved land in the state.

Between 2018 and 2020, NEFF expanded our owned lands by nearly a third—from 29,000 to more than 38,000 acres—by adding four new Downeast Maine properties to our network of Community Forests. This impressive acreage forms the heart of our work to demonstrate Exemplary Forestry, but where does the million-plus acre number come from? The answer lies with landscape-scale conservation easements (CEs) NEFF holds on private working forestland in northern, western, and Downeast Maine.

This year marks the twentieth anniversary of NEFF's 2001 purchase of the monumental 762,000-acre Pingree easement—still the largest working

forest conservation easement in the United States—and 2020 marked fifteen years since NEFF protected 335,000 acres through the Downeast Lakes Forestry Partnership. These acres are split between NEFF's 312,000-acre Sunrise Tree Farm easement on Typhoon L.L.C lands and NEFF's 23,000-acre easements on Downeast Lakes Land Trust's Farm Cove Community Forest.

Like any easement, the primary responsibility of NEFF as the holder is to monitor and steward the terms and protections of these large-scale easements in perpetuity; essentially, NEFF's task is to make sure the properties' natural resources are protected in keeping with the easement terms. Every NEFF easement is uniquely crafted to match the goals of the landowner and the natural resources present on the land, and so there is no one-size-fits-all approach to stewardship. The scale of the Pingree and Downeast easements initially created a challenge for NEFF, as we had never before attempted easement-monitoring of such large properties, and neither had anyone else! NEFF has since crafted and adapted a streamlined easement inspection process that has proven successful.



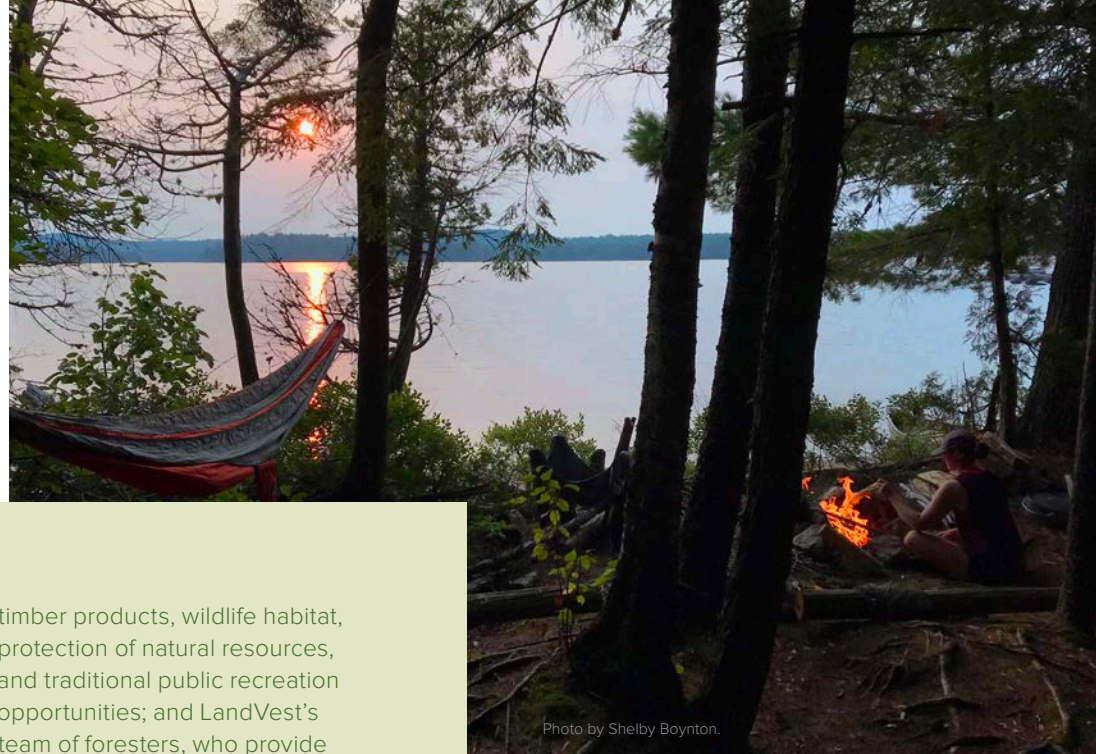


Photo by Shelby Boynton.

## BUILDING CONSERVATION PARTNERSHIPS, ONE EASEMENT AT A TIME

It's easy to see the easement monitoring and stewardship process as a cut-and-dried, limited process: NEFF staff members visit each property annually to track changes on the land, learn about recent management activities, and hear the owners' goals for the forest; in turn, NEFF staff members are available throughout the year to answer landowners' questions and provide advice.

NEFF takes a broader view of these steps: they are some of the relationship-building opportunities that make conservation easements an essential tool resulting in inspiring partnerships with private landowners; in the case of large-scale easements, NEFF also partners with expert forestry companies who represent landowners and manage the landowners' properties. These partnerships help advance a shared vision of healthy and protected New England forests.

NEFF coordinates with two such expert representatives when monitoring the Pingree easement lands: Seven Islands Land Company, which manages the Pingree family's land holdings for sustainably harvested

timber products, wildlife habitat, protection of natural resources, and traditional public recreation opportunities; and LandVest's team of foresters, who provide high-standards management to a 114,000-acre section of the Pingree CE that is now owned by Clayton Lake Woodlands Holdings.

For NEFF's Downeast Lakes Forestry Partnership easements, NEFF collaborates with Wagner Forest Management, the managers for most of the land under NEFF's Sunrise easement; Downeast Lakes Land Trust, who granted NEFF the easements for their Farm Cove Community Forest; and the Baskahegan Company, which recently purchased more than 24,000 acres of the northern Sunrise lands.

Our easement partnerships in Maine are built on a foundation of open communication, trust, and the shared goal of permanently protecting these vital working forests. NEFF knows that the properties' managers quickly address issues identified on the land, and immediately get in touch with NEFF when considering new management activities or when questions about easement terms arise. Our partners trust NEFF to efficiently identify possible issues so they can focus on operations.

NEFF worked with faculty at the University of Maine to create a three-level process for annually inspecting these easements.

Initially, Levels One and Two consisted of a remote-sensing satellite scan followed by aerial photography taken from a plane, and NEFF contracted with the University of Maine in Orono to conduct these steps through its School of Forest Resources and Maine Image Analysis Lab. Level Three remains unchanged, and consists of a ground visit by NEFF staff or a consulting forester to sites where activity at a certain location cannot be identified through the first two tiers.

The original Level One utilized remote sensing by satellite through Landsat Thematic Mapper (TM) forest change detection—in which TM sensors placed on earth-monitoring satellites operate in numerous spectral bands, including infrared, to gather forest data—based on a process developed by Dr. Steve Sader at the School of Forest Resources. These methods created an annual “heat map,” highlighting forest canopy changes over the landscape. However, NEFF and UMaine staff came to realize the changes the system primarily

## FIELD STORIES

### VACATION

In August 2018, NEFF Stewardship Associate Beth Gula brought a canoe and camping gear along to the annual Downeast CE visit and stayed a few extra days after she completed official monitoring. Setting off across Pocomcus Lake from the bustling Elsemore Landing campground, Beth enjoyed a mini beach vacation at a remote campsite tucked into a cove off West Grand Lake. Downeast Lakes Land Trust manages a number of primitive, paddle-in campsites that are part of a water trail through the greater lakes region. What memory from this trip has most stuck with Beth? Tending roasting potatoes in a dutch oven over the campfire, while a brilliant sunset of orange, pinks and purples blazed across the sky. (See page 4 for an additional vacation photo.)

### WILDLIFE

While making field visits, NEFF staff members catch glimpses of wild animals, including Bald Eagles, Ruffed Grouse, Black-throated Blue and Black-throated Green Warblers, American Woodcock and a huge bull moose whose afternoon nap they once unintentionally disrupted while riding in Downeast Lakes Land Trust CEO David Montague's truck.

### COMPARING NOTES

During these large-scale CE visits, NEFF staffers say they enjoy conversing with knowledgeable foresters like Paul Swett and Bob Cousins of Wagner Forest Management, Ernest Carle of Downeast Lakes Land Trust, and Kyle Burdick of Baskahegan Company. These trips also give NEFF's stewardship team a chance to get up-close looks at how these organizations work to balance traditional recreation, hunting and fishing, careful timber harvests, and the maintenance and creation of habitat suitable for umbrella species like Canada Lynx and American Marten.

identified were timber harvests, a management activity broadly allowed via the working forest easement terms so long as a clear-cut percentage threshold is not exceeded and buffers around important habitat features are maintained. These conservation easements do not require NEFF to track fine details and data for every harvest.

Eben Sypitkowski and Betsy Cook, past NEFF Easement Stewardship Managers, collaborated with Chris Pryor, NEFF's Director of Forest Stewardship, and UMaine to re-assess Level One. They determined that the change detection was not often identifying actual threats to the easement, which primarily came from activities like illegal dumping by third parties and occasional encroachments along the boundaries—threats which were often too small for Landsat TM to detect. These issues typically start small and may expand if not identified and addressed early on.

NEFF staff re-configured Level One in 2014 to a manual scan by UMaine of the most recent available

satellite and ortho-imagery in search of notable changes across the landscape. In Level Two, high-resolution aerial photos are taken from UMaine's Cessna 172 plane over identified areas of interest. Dave Sandilands of UMaine's Wheatland Geospatial Lab conducts both of these tiers as a consultant; he inspects different units of the Pingree easement on a four-year cycle, as it actually encompasses multiple large forest tracts around the state. The UMaine aircraft, based in Bangor, is equipped with a sensor pod containing a modified near-infrared camera system, optimized to enhance the differences between vegetation and manmade objects.

Sandilands typically conducts his photo mission flights—each a full-day event—in the springtime following the disappearance of snow and prior to hardwood leaf-out. This brief period offers the least obstructed view of what's happening beneath the forest canopy. He then evaluates the collected imagery, and characterizes and flags disturbances for potential Level Three visits.



From a cove off West Grand Lake, Beth Gula and friends watch the sun set. Photo by Shelby Boynton.



For Level Three, NEFF staff members visit the Downeast easements each summer or fall and spend several days driving long distances and then bushwhacking in to inspect the UMaine-identified priority sites. Even though the Downeast Lakes region and Washington County are renowned destinations for outdoor recreation, there is an inherent sense of solitude and remoteness when hiking through the forest and driving back roads. During these trips, staff members typically stay in cabins at local rustic lodges and camps, and enjoy wonderful hospitality and loon calls echoing across the lakes at night.

Level Three inspections are then rounded out by Sherm Small, a New England Forestry Consultants forester with vast experience in the deepest forests of Maine, who visits identified sites on the Pingree easement each autumn; he has been involved in the Pingree CE since the beginning as a key compiler of its baseline report, and also manages a number of NEFF's Maine Community Forests as a consultant. The best timing for Small's visit is in late September or October when leaf-off conditions improve visibility and make trekking in the forest easier. By November—sometimes even late October—the northernmost reaches of Pingree can already be blanketed in heavy snow.

After all three of these easement-inspecting steps—remote monitoring, UMaine's flyover photography, and on-site visits by NEFF and Small—are complete, NEFF staff compiles an annual report that documents notable property changes, potential issues, observations and ground photographs, and then shares it with the owner and their representative. Typically, NEFF also holds an in-person meeting with easement representatives at the partner companies' headquarters or in the field to discuss any unresolved issues



NEFF Stewardship Associate Beth Gula, Dave Sandilands of University of Maine, and Paul Swett of Wagner Forest Management teaming up for the Level Three ground inspection of Sunrise Tree Farm in 2018. Photo by Andrew Bentley.

and maintain a working relationship, but these steps went largely digital in 2020 due to the pandemic.

Through this annual process, potential problems are identified early on when they are still easily resolved, and then addressed cooperatively by NEFF and the landowner before they damage the natural resources easements are meant to protect.

NEFF is honored to not only provide permanent protection for these vital working forests, but through stewardship efforts, to also help ensure the many benefits they offer the world remain effective and intact for generations to come. These forestlands are home to large blocks of irreplaceable wildlife habitat, help clean New England's air and water, offer remarkable recreation opportunities, and generate a host of useful wood products while being

managed to high standards—Seven Islands' forest management is certified under both the Sustainable Forestry Initiative (SFI) and Forest Stewardship Council (FSC), the Sunrise lands are certified by SFI, and both Downeast Lakes Land Trust and Baskahegan lands are certified under FSC.

May these forestlands continue to grow and be managed well for many centuries to come, shepherded along by all those who care for them. 🌿

---

To learn more about NEFF's Pingree and Downeast Lakes easements—and the collaborative efforts that lead to their creation—visit [newenglandforestry.org/learn/land-conservation/conservation-achievements](https://newenglandforestry.org/learn/land-conservation/conservation-achievements)

# PTIF RECEIVES NEW DONATION

WRITING BY Sophie Traficonte, NEFF Conservation Project Manager and Frank Lowenstein, NEFF Chief Operating Officer

At the end of 2020, New England Forestry Foundation received its second land donation to the Pooled Timber Income Fund (PTIF)—the first donation came from Richard and Cynthia Perkins in May 2020—a new and innovative planned giving tool now in its third year of operation.

This new land is particularly significant to the history of forestry in New England, as it was owned by David M. Smith, author of the touchstone book, *The Practice of Silviculture*, and a long-time professor at the Yale School of the Environment—the oldest operating school of forestry in the United States. His book has been released in four editions and in several translations, and at the time of Smith's death in 2009, the Yale University public affairs office called this book the most widely used forestry text in the world. Which is to say, this donated property likely helped shaped the practice of forest management as we know it today.

The land was donated by Dr. Smith's daughters, Nancy and Ellen Smith, who will receive lifetime income from NEFF's management on the 117 forest acres they donated and the 14 properties already in the fund.

NEFF also received two cash donations into the PTIF as 2020 drew to a close; this opens up a new avenue for individuals who might not have land to donate but would like to put their cash to work for conservation and simultaneously provide a stable stream of income for themselves or their children. With these donations, the PTIF is now well and stably launched, with several available pathways for individuals and foundations to advance conservation.

## WHAT IS THE PTIF?

The Pooled Timber Income Fund offers landowners the opportunity to permanently protect their forestlands and receive tax benefits and lifetime income. It simultaneously accelerates the protection of working woodlands in the region, and it provides short and long-term security to woodland owners.

The PTIF is a new application of the well-established planned giving tool, the pooled income fund. As in a traditional pooled income fund, donors contribute assets to a charity, the charity invests the assets, and the income after expenses is distributed to the donors until their death, at which point the assets belong to the charity. Donors receive both lifetime income

While leading an October 2008 walk-and-talk event at the Smith property, Matt Kelly (pictured center wearing a knapsack) explained both how Dave Smith managed the land and influenced silviculture. Kelly was one of Smith's students at Yale and inherited co-authorship of his textbook, *The Practice of Silviculture*. Kelly also served on the board of the Rattlesnake Gutter Trust. Photo by Mary Alice Wilson





and a charitable tax deduction at the time of the initial donation. What makes the PTIF different is that in this model, landowners donate their land to NEFF for permanent conservation, and the timber on that land to a pooled income fund set up and run by NEFF. The landowners receive units in the fund proportional to the value of their timber donation and the fund manages the timber in accord with NEFF's green-certified, Exemplary Forestry practices. Cash donors similarly receive units, and NEFF will use the cash to conserve new forestland.

Because timber is harvested in most years from one or more of the pooled properties, each member of the fund receives a more even stream of funding than by owning their own forestland, and there is a reduced risk of loss from weather, insects, various hazards, and reduced risk regarding timber prices due to the greater diversity of timber species and age classes.

Participants in the PTIF are eligible for a number of potential tax benefits (i.e., income, property and estate taxes), the value of which will depend on personal circumstances. NEFF will pay property taxes on the property while it is enrolled in the PTIF. On the death of the landowner's beneficiaries, the landowner's shares are transferred to NEFF and the donor's share supports NEFF's ongoing forest conservation work.

The PTIF is a great tool to help with advancing land conservation and spreading Exemplary Forestry throughout New England. This tool is unique in its ability to provide donors with both financial benefits and conservation benefits. By supporting this tool, we can further help the people of New England to sustain their way of life, protect forest wildlife habitat and ecosystem services, and mitigate and adapt to climate change.

### SMITH FAMILY AND PROPERTY HIGHLIGHTS

Nancy and Ellen Smith live out of state and inherited their 117-acre property in Leverett, Massachusetts from their father, Dave Smith. They have decided to name it in his honor as the David M. Smith Forest. Smith was as famous as a forester gets, and was well-known and well-regarded for his decades of work as a forestry educator and for promoting good forestry management in New England. His youthful familiarity with this new PTIF forestland helped inspire his career choice, and the six decades he spent managing it surely shaped his later work.

The Smith woodland—made up of mostly white pine and oak, hemlock, mixed hardwoods—sits on Rat Hollow Road and lies next to the Mosher Conservation

Area, which is owned by the Rattlesnake Gutter Trust. The Rattlesnake Gutter Trust also holds an easement on the Smith property and helps to maintain the property and provides public access to the woodlands, which contains several trails for recreation, including a portion of the old Metacomet and Monadnock (M&M) Trail. In addition, the Smith property has adjacency or close proximity to a number of conserved parcels in Leverett. The Mosher Conservation Area and Paul C. Jones Working Forest lie to the north, and the Roaring Brook Conservation Area and the D.H. Banks Sanctuary lie to the south. These areas of conservation create thousands of acres of contiguous forestland.

NEFF plans to continue Dave's careful management. The PTIF uses Exemplary Forestry management on all of its properties, which leads to older, more



To explore whether donating your land or making a cash donation to the PTIF is a good match for your particular situation, please contact Sophie Traficonte via email at [traficonte@newenglandforestry.org](mailto:traficonte@newenglandforestry.org) or by phone at **978-952-6856, x122**.

diverse forests with a mix of tree age classes. Research suggests that this type of forest management makes the forests more resilient to climate change impacts and better able to adapt to them. The forest also grows faster, and has a higher volume of wood than a typical forest at any point in time, which increases the benefit to society due to the forests' action in removing damaging carbon dioxide pollution from the atmosphere. NEFF is honored to have Dave Smith's land in the PTIF. 🌿





FEATURED COMMUNITY FOREST

# ARNOLD FAMILY FOREST

WRITING BY Tinsley Hunsdorfer, NEFF Communications Manager

New England Forestry Foundation's four new Downeast properties aren't the only Maine parcels in its network of Community Forests. If you're curious about NEFF's 16 additional Maine forestlands, getting to know Arnold Family Forest, a habitat-rich property that sits at the intersection of land and sea, is a great place to start.

---

Located off Casco Bay about 15 miles northeast of Portland, Arnold Family Forest is bordered to the west by the seaward bound Lambert Point Stream and Redding Creek, and its southern border is just 1,500 feet from the bay's shoreline.

"I have always found the meeting points of forests and water to be interesting and beautiful, particularly when that water is the sea," said Chris Pryor, NEFF Director of Forest Stewardship. "The Arnold Family Forest is one of the few NEFF properties that borders tidal waters, and it does not disappoint."

Well established hiking trails in the southern portion of the property wind through a mixed-species forest stand—composed of Eastern Hemlock, White Birch, Red Oak, Red Maple, Balsam Fir, and poplar—to a waterside view of Redding Creek. The northern two-thirds of the property consist of an oak-pine forest type that is common on the southern Maine coast as well as a small Eastern White Pine plantation.

The forest was last harvested in 2017. Harvest then included thinning in and around the pine plantation to encourage the growth of the dominant pines and remove poorly formed and mature hemlock, poplar, and birch in the abutting stands. This should improve growth of the remaining oak and maple. These management activities were conducted in a manner that minimized disruption to trail use and that fully protected the forest's remarkable wildlife habitat.

Arnold Family Forest is part of an ecologically rich landscape that encompasses the northwest corner of Casco Bay, its adjacent lands and waterways, a host of peninsulas and islands, and several specialty habitats of critical importance like eelgrass beds. The Beginning With Habitat program of Maine Department of Inland Fisheries

and Wildlife (MDIFW) has declared this area, now called the Maquoit and Middle Bay Focus Area, to be a place of Statewide Ecological Significance.

Within the Focus Area, MDIFW has prioritized four Significant Wildlife Habitats—all of them to do with wading birds, waterfowl, shorebirds and seabirds—and Arnold Family Forest's stretch of Redding Creek frontage and riparian habitat have been designated as Significant Tidal Wading Bird and Waterfowl Habitat.

NEFF's land stewardship team is well equipped to balance harvesting and other forest management activities with the preservation of this high-priority habitat; all NEFF Community Forests are managed to Exemplary Forestry standards, which call for the promotion of general wildlife habitat in addition to the protection of riparian habitat, aquatic habitat, and any other habitat deemed special—or Significant, in the case of Arnold's tidal habitat.

What does this mean for visitors to Arnold Family Forest? Be sure to bring binoculars along, as there's a decent chance you'll see wading birds and waterfowl in and around the creek, and even if you don't—you'll still be smack in the middle of a wider birding hot spot.



## LOCATION



Freeport, ME

## SIZE



97 acres

## AMENITIES



Trails



Parking



Streams

Mast Landing Audubon Sanctuary, the Town of Yarmouth's Spear Farm Estuary Preserve, Wolfe's Neck State Park, and Bradbury Mountain State Park are all nearby, as is NEFF's own Bliss Woods property. Arnold Family Forest and Bliss Woods are both subject to conservation easements held by the local Freeport Conservation Trust, yet another organization that offers nearby hiking trails—and a chance to see a few more birds.

## 1960s

According to Mrs. Arnold, the forest's white pine plantation was established in the mid-1960s to fill in the runway of an airstrip which her husband, Duncan Arnold, had built in the 1950s.

## 2002

Barbara H. Arnold and her family made a gift of this wooded property to NEFF, which had been in the Arnold family for three generations.

## 2003

Leo Blair donated an additional 28 acres to the Arnold Family Forest, which is now known as the Blair Addition and is home to most of the property's trails.

## WHERE THE LAND MEETS THE SEA

Ocean adjacency seems to have had three main impacts on Arnold Family Forest: greater wildlife diversity, the presence of marine-derived soils, and tree blowdowns.

### BIRD HABITAT

According to records pulled from Cornell Lab of Ornithology's eBird database, a number of coastal wading birds and waterfowl have recently been spotted within a mile of Arnold Family Forest, which suggests these same species may be making use of Redding Creek and the property's tidal and riparian habitat. These species include Sanderling, Greater Yellowlegs, Least Sandpiper, Black-bellied Plover, Dunlin, Killdeer, Semipalmated Sandpiper, American Woodcock, Horned Grebe, Pied-billed Grebe, Snowy Egret, Great Blue Heron, Black-crowned Night-Heron, Green Heron and American Bittern.

The property's corner of Casco Bay also receives regular visits from other water-dependent species like the Belted Kingfisher, Bald Eagle and Osprey. Of all the species listed here, Osprey were actually the birds spotted closest to NEFF lands.

Photos by Charlie Reinertsen

## SOIL AND GROWING CONDITIONS

Of the seven soil types found on the property—Buxton silt loam, Elmwood fine sandy loam, Hollis fine sandy loam, Hollis very rocky fine sandy loam, Scantic silt loam, Suffield silt loam, and Tidal marsh—a full four have ties to the marine environment.

Buxton silt loam soil is formed in a silt and clay marine sediment, and Scantic silt loam and Suffield silt loam soils are formed in marine sediment; most likely these soils formed after the glaciers last retreated from New England but before the land had rebounded upwards after being freed from the weight of ice. Thus, marine sediments are now above sea level. Tidal marsh soils have an organic layer over a silt, clay, and sand layer, and are flooded daily by tidal waters.

Most of these marine soils suitable for forestry—i.e., all but the soil in a tidal zone—perform about as well as Elmwood and Hollis soils when it comes to preventing tree blowdowns, but Scantic silt loam is noted as having “a severe potential for windthrow.” Paired with strong winds coming in off the ocean and bay, such soil types contribute to blowdowns, and Arnold Family Forest was indeed harvested in 2008-2009 in part to salvage timber lost to blowdown; foresters also conducted some thinning, partially to preserve windfirm trees. 🌿



# ENVIRONMENTAL CHILDREN'S BOOKS

## for Challenging Times

WRITING BY Frank Lowenstein, NEFF Chief Operating Officer

Children growing up today face an increasingly complex, and at times frightening, world. Among the many sources of anxiety and insecurity lie unprecedented changes in the natural world. Those changes—more dramatic than any that have occurred since the dawn of agriculture 12,000 years ago—threaten our food, air, water, climate, and sense of place.

Books can help children to understand the losses in the natural world that seem to worsen daily. Books can also help expose kids to landscapes they may not have access to, and can serve as a reminder of the beauty of nature when weather discourages real-life exploration. (Though it's always worth remembering, as author Alfred Wainwright said, "There's no such thing as bad weather, only unsuitable clothing.") Books can help equip kids to love, defend and spend time in nature.

In 2020, dire assessments of the state of the environment rained down from scientists, governments, insurance executives (who, notably, are paid to assess risk), global financial institutions, and even the British royal family. Those paying attention heard carefully worded and studied projections of imminent ecosystem collapse in 20 percent of the world's nations; of unsurvivable heat arriving to South Asia decades earlier than previously estimated and spreading to other areas soon thereafter; and of Arctic sea ice and ice caps both in jeopardy, threatening coastal cities around the world with flooding and northern hemisphere agriculture with increasingly unstable and unsuitable growing seasons.

So as environmentalists, parents, educators, book lovers, authors, or simply anyone interested in books, nature, and children, how can we help

children to cope? What books are out there that build a love and understanding of nature and the threats to it, and that help children imagine a better future and see themselves as actors with agency who can make a difference?

For the last six years, I have taught environmental issues through both Brandeis University and Harvard Extension School. Although college students are not the same as the younger readers on whom this article focuses, some observations are relevant. They are ready to hear that there is hope and opportunity, but may be unaware that people have banded together to make a difference for the environment before, and no doubt can do so again. Moments like the Cuyahoga River catching on fire, 20 million Americans turning out for the first Earth Day, the great blue marble of Earthrise captured from the moon are unfamiliar to them. When given the opportunity to hear about the importance of individual vision—often delivered in book form—and organizational skill in making a difference in the world, they can be excited to action.

The history of environmental progress is based on the determination and influence of individuals. The growth of forestry as a profession in the United States really originated in George Perkins Marsh's 1864 best-seller *Man and Nature*, and Marsh's advocacy for wise and careful stewardship was taken up by people like Bernhard Fernow,



### WE ARE THE WATER PROTECTORS

Lindstrom is part of the Turtle Mountain Band of the Ojibwe and writes about the water protectors—women in Ojibwe culture. This book is beautifully illustrated by Michaela Goade, and offers an inspiring tale of a young girl finding her place to stand up against the "Black Snake" that threatens to poison the water. The Black Snake is the Dakota Access oil pipeline, and the story ties to the ongoing struggle by American Indians to protect their heritage and all of our environment against fossil fuel infrastructure.



Carl Schenck and Gifford Pinchot, who laid the foundations of American forestry. And Pinchot demonstrated the importance of organizational skill, helping found both the U.S. Forest Service and the Yale School of Forestry. Similarly, Marjorie Stoneman Douglas laid out remarkable natural resources at risk in her book *The Everglades: River of Grass*, changing the concept and image of the Everglades from worthless swamp to treasured natural system and helping drive over the finish line a decades-long effort to get it designated a national park. The history of environmental activism is full of similar stories of individuals making a difference: Rachel Carson on pesticides, Teddy Roosevelt on national parks, Lois Gibbs on toxic waste, Howard Zahniser on wilderness, and perhaps today's most relevant example, Greta Thunberg on climate.

Talk about kids having impact! Greta Thunberg is the teen who overcame her own social anxiety to found the school climate strike movement “Fridays For Future” to demand global action on the climate crisis and stem its impact on future generations. At the age of 15, she began speaking publicly on the critical urgency of the climate crisis, eventually addressing the UN climate conference, the World Economic Forum, and the United Nations General Assembly. Notably, she reached the General Assembly by crossing the Atlantic on a sail boat, so as to avoid the climate impact of flying.

So which children's books incorporate these themes—inspiring a love of nature, understanding the threat in front of us, coping with the stress and anxiety it can arouse, organizing for action, and finding the import and impact of the individual—all of course in age-appropriate doses? I based this list on books that resonated with my own nature-obsessed sons when they were young, on advice from friends and family



### WHAT A WASTE

This book is a standout in the very strong line up of non-fiction environmental books for kids from publisher DK. As with all of their books, the illustrations are outstanding and production values high. Here author Jess French details the many different kinds of waste, how they affect the planet and what to do with them to reduce their impact. Check out their brand-new *Climate Emergency Atlas* as well.

about what worked in their kids' lives, and on thoughts garnered from colleagues in my professional work both at universities and at NEFF. It is, of course, not a complete list. There are hundreds if not thousands more books about the environment, and many of them are excellent. Take the ones I offer here as a suggested starting point, to inspire your own young folks toward a healthy nature-obsession, and to equip them with suitable emotional and intellectual clothing for the coming turmoil. 🌿

### Children's Books

- Grandfather Twilight* by Barbara Helen Berger (1996)
- Bertolt* by Jaques Goldstyn (2017)
- The Giving Tree* by Shel Silverstein (1964)
- We Are Water Protectors* by Carole Lindstrom (2020)
- Owl Moon* by Jane Yolen (1987)
- On a Magical Do-Nothing Day* by Beatrice Alemanga (2018)
- Dawn* by Molly Bang (1983)
- One Morning in Maine* by Robert McCloskey (1952)
- My Side of the Mountain* by Jean Craighead George (1959)
- The Lonely Polar Bear* by Khoa Le (2018)
- Katherine and the Garbage Dump* by Martha Morris (1993)
- The Lorax* by Dr. Seuss (1971)
- The Water Princess* by Susan Verde (2016)
- The Great Kapok Tree* by Lynne Cherry (1990)
- What A Waste* by Jess French (2019)
- One Plastic Bag* by Miranda Paul (2015)
- Hoot* by Carl Hiaassen (2002)
- Crow and Weasel* by Barry Lopez (1990)
- Island of the Blue Dolphins* by Scott O'Dell (1960)
- No One Is Too Small to Make a Difference* by Greta Thunberg (2019)

### Books for Teens to Adults

- The Long Thaw* by David Archer (2016)
- Bayou Farewell* by Mike Tidwell (2003)
- The Wizard and The Prophet* by Charles Mann (2018)
- The Anatomy of Power* by John Kenneth Galbraith (1983)



This article first appeared in *Old Books, Young Readers: Backlist and Forgotten Books for Babies through Teens*, curated and published by Sallie Lowenstein.

# SPOTTING SPRING EPHEMERALS

WRITING BY Tinsley Hunsdorfer,  
NEFF Communications Manager

As winter loosens the last of its hold on New England and the days grow longer and brighter, look for one of the natural world's most beautiful heralds of spring: the unfurling blossoms of ephemeral flowers.

Spring ephemerals—herbaceous, perennial flowering plants found in deciduous forests—get their name from their fast-paced lifecycles. They are the early risers of New England's spring flowers and can only be viewed for a few short weeks before they return to a dormant state.



Trout Lily  
*Erythronium americanum*

Between the end of the spring snowmelt and the full leafing of deciduous trees, spring wildflowers manage to bloom and produce seed; the ephemerals have evolved to take advantage of the narrow window during which sunlight directly reaches the forest floor by being among the first to produce leaves and capture the energy of the sun. Most of them also bloom during these few weeks and their blossoms are some of the showiest of New England's native wildflowers.

Some of these flowers are often found in calcium-rich forests, which is to say, forests where limestone and marble are plentiful; many grow along streams and brooks, or along rocky ledges, cliffs and mountainsides. This makes the Housatonic Valley and Valley of Vermont—located on the western edge of Vermont, between the Taconic Mountains on the west and the Green Mountains on the east—good starting points for finding wild ephemerals. Look for rocky limestone ledges along the western edge of both valleys.

New England Forestry Foundation has a few properties that meet these criteria, but only one of them is moderately easy to access. NEFF's 434-acre Nichols Memorial Forest is located in the Valley of Vermont region and sits on a relatively level spot above the valley floor. A country road and logging trails pass through the property, but be prepared to bushwhack to see the ephemerals as there are no formal, maintained trails. Wear long pants and spray your socks and pants hems with bug repellent to reduce the chance of picking up ticks; they also like this same seasonal window.

Some spring ephemerals are rare and protected species, and all spring ephemerals play important parts in their ecosystem, so if you choose to see them in person, limit yourself to admiring them from a safe distance and taking a few photos. Please do not touch the plants, pick flowers, or disturb the plants in any way. 🌿

## EPHEMERAL SPECIES TO LOOK FOR:



Red Trillium  
*Trillium erectum*



Bloodroot  
*Sanguinaria canadensis*



Dutchman's Breeches  
*Dicentra cucullaria*



Round-lobed Hepatica  
*Hepatica americana*



Virginia Springbeauty  
*Claytonia virginica*

For more information, visit [mass.gov/news/now-is-the-time-to-look-for-blooming-spring-ephemerals](https://mass.gov/news/now-is-the-time-to-look-for-blooming-spring-ephemerals)





# THINKING ABOUT THE FUTURE? SO ARE WE!

As forests continue to come into focus as a core component of climate change solutions, NEFF's mission is aligned with this approach and we're ready to tackle the complex challenges of climate change as it impacts New England. We need to ensure these efforts remain front and center for the long haul.

As you think about the future, please consider including a bequest to NEFF in your estate plans this year. Future generations are depending on us. NEFF's innovative Pooled Timber Income Fund offers new opportunities that may be important to your estate planning; see the article in this newsletter on page 7.

## The CARES Act Charitable Giving Incentives—Extended and Enhanced

The charitable giving incentives that were put in place for 2020 by the CARES Act have been extended through 2021, including allowing deductions up to 100% of AGI for cash donations for those who itemize their taxes. For those who don't itemize deductions the universal charitable deduction remains and for some taxpayers has been enhanced. The difference is that for 2020, the deduction was limited to \$300 per tax return, while the new provision allows a married couple filing jointly to get double the deduction for 2021 if they make \$600 in cash gifts to charity. 🌿

---

For more information, contact:  
Penny Flynn via email at [pflynn@newenglandforestry.org](mailto:pflynn@newenglandforestry.org)  
or by phone at 978.952.6856, x101.





NEW ENGLAND  
**FORESTRY**  
FOUNDATION

32 Foster Street | P.O. Box 1346 | Littleton, MA 01460  
T 978.952.6856 | F 978.952.6356 | [newenglandforestry.org](http://newenglandforestry.org)

NONPROFIT ORG  
U S POSTAGE  
**PAID**  
THE MAILING CENTER  
05641

Photo by Charlie Reinertsen

