ConWatch

The Garden Club of America • Summer 2023

CONSERVATION HEROES

Ecologist, artist, explorer, and photographer—Carlton Ward Jr.

John Turner—Pine Barrens' Preserver and Conservationist

Eat the Forest of the Future

Louie Schwartzberg—Helping Humans See the Beauty of Nature

World-Famous Golfer Designing Golf Courses with The Environment in Mind—Jack Nicklaus

Protecting Coastal Ecosystems

Sam Hodder—Committed Conservationist

Tracking for Bird Health—Stemming the Decline of Grassland Birds

Green Architect and Environmentalist—Bob Berkebile

Who Knew? Can We Use Prescribed Fire to Keep Tallgrass Prairies Diverse?

FROM THE EDITOR

This issue, "Conservation Heroes," showcases the work of passionate conservationists. Their careers extend beyond passion to years upon years of work toward a better future.

Each hero, as recognized by the GCA in 2023, has unique talents, but also shares a common love of nature. Discover Carlton Ward Jr. who uses his camera to tell the stories of endangered species. Read how Bob Berkebile pioneered the formation of the U.S. Green Building Council. And how Jack Nicklaus, the famed golfer, brought conservation practices to golf course design. You will also discover the heroes saving redwoods and sequoias, protecting nature through films, and of restoring hope for the wilderness.

Two years ago, I envisioned *ConWatch* as a channel for ideas, for optimism, and for solutions to the pressing issues facing the earth. It would be filled with innovations, creative designs, and inspiration. It would foster hope.

With the wisdom and talent of the GCA Conservation Committee, and with Carla Passarello at my side, we designed each issue to highlight conservation success stories and tools for action. Thanks to the generosity of our authors, we achieved our vision.

I appreciate everyone who fueled my energy and enthusiasm. It is bittersweet to say goodbye, yet I am thrilled to introduce your new editor, Lynn Steiner, Little Compton Garden Club, Zone I. I can't wait to read the issues she and the assistant editor, Jane Corrigan, The Garden Club of Philadelphia, Zone IV, create.

**—Suellen White, Garden Club of Denver, Zone XII,
Vice Chair, Editor, *ConWatch*, Conservation Committee**

News from the Conservation and NAL Committee

One of the most impactful things the GCA does is recognize national conservation leaders and environmental advocates with Medals of Honor and Honorary Member awards. This issue highlights seven of our 2023 awardees.

When we step back, our Con/NAL Committee members can proudly say that we have shined a light on the critical conservation issues affecting the world today. We have **trained** a host of new advocates, called on members of Congress to advance **environmental legislation**, written multiple **letters to policy makers** to advance policy (five just since our last issue of *ConWatch*!) and, we have hopefully inspired other GCA club members. Just like our GCA awardees, each one of us can make a real difference in healing the Earth. Join us as we Garden, Create, and Advocate!

**—Cayce McAlister, Garden Club of Nashville, Zone IX,
Chairman, Conservation Committee and
Karen Gilhuly, Woodside-Atherton Garden Club, Zone XII,
Chairman, NAL Committee**

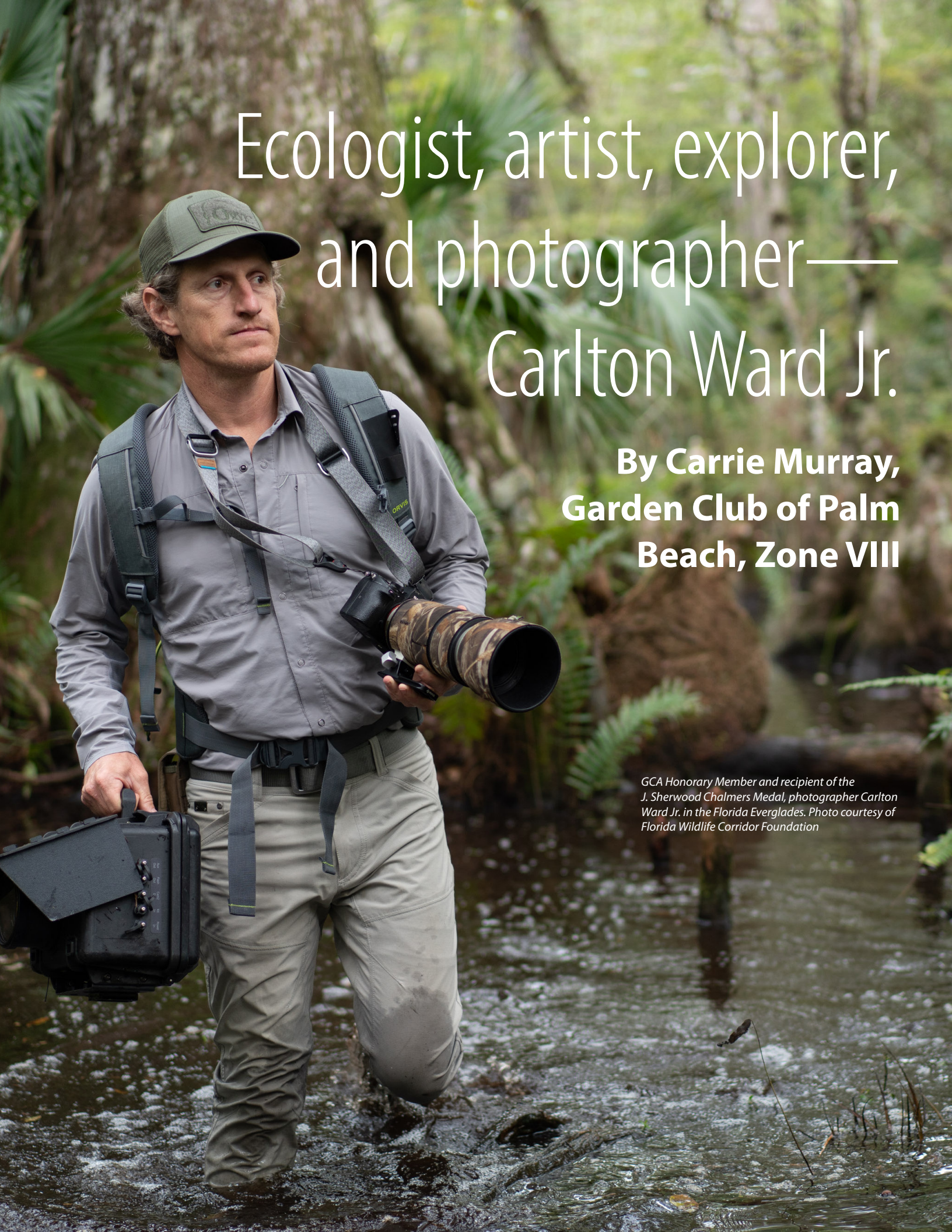
Cover: *GCA Honorary Member Sam Hodder surveys an old growth redwood forest, now renamed Tc'ih-Léh-Dûñ. For millennia, this grove was holy ground for the Sinkyone people. Photo courtesy of Save The Redwoods League*

Banner: *The Long Island Pine Barrens. Photo by Kent Mason*

ConWatch *is produced three times a year by the Conservation Committee of The Garden Club of America. It is available online in July, November, and April. Submissions and comments are encouraged and welcome. Use this* **link** *to submit, or contact* **conwatch@gcamerica.org**

Ecologist, artist, explorer, and photographer—Carlton Ward Jr.

By Carrie Murray, Garden Club of Palm Beach, Zone VIII



GCA Honorary Member and recipient of the J. Sherwood Chalmers Medal, photographer Carlton Ward Jr. in the Florida Everglades. Photo courtesy of Florida Wildlife Corridor Foundation

A rare and threatened Florida panther prowls its native habitat. Photo by Carlton Ward Jr.

Carlton Ward Jr.'s new documentary, *Path of the Panther*, stars the last big cat to roam wild in the eastern United States and the battle to save it by allowing safe passage beyond its historic home in the Florida Everglades. Go to: pathofthepanther.com

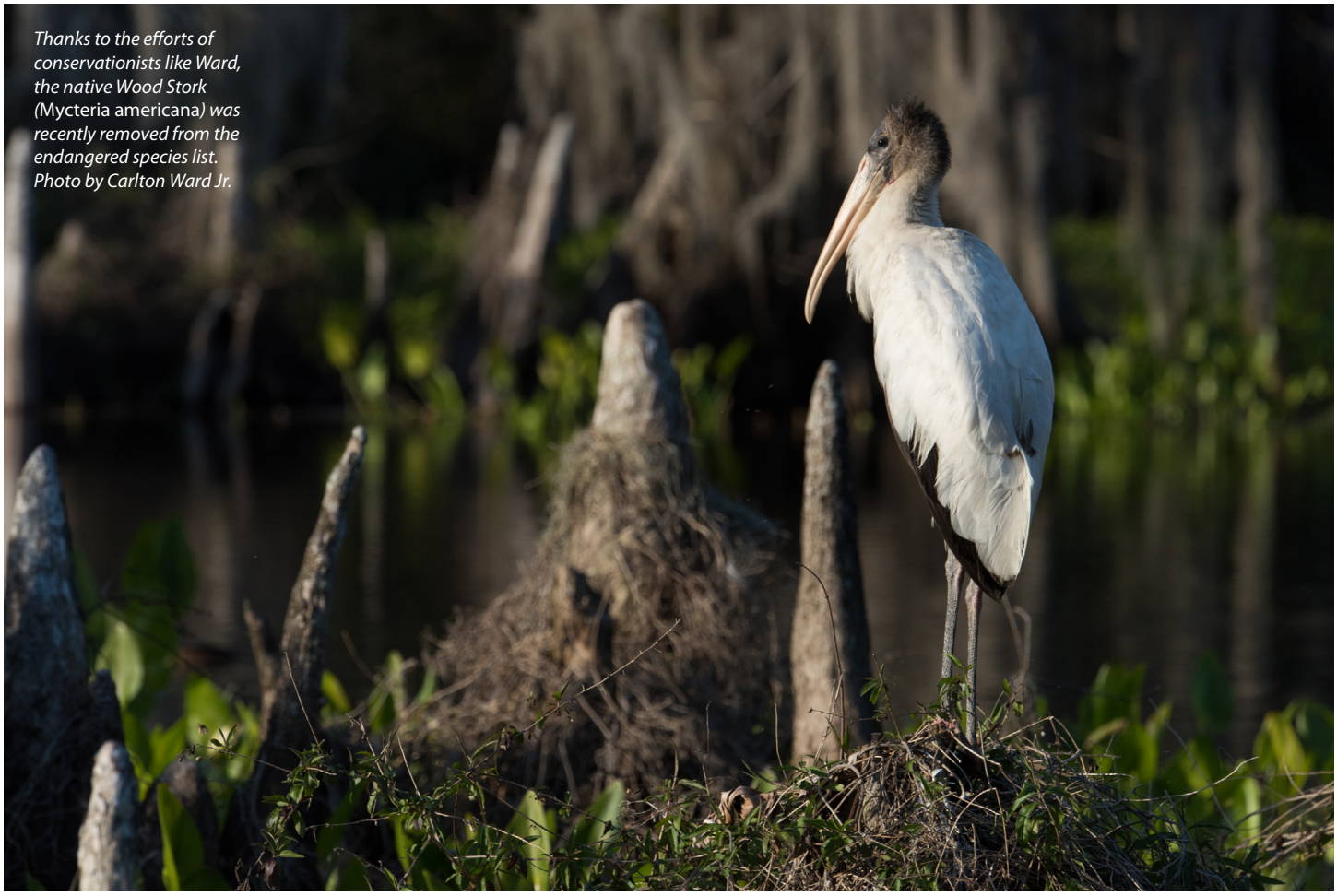
Carlton Ward Jr., an honorary member of the Garden Club of America since May 2022, is the 2023 recipient of the J. Sherwood Chalmers Medal for photographic achievement.

Ward's work is dedicated to the very mission of the GCA: "restore, improve, and protect the quality of the environment through educational programs and action in the fields of conservation and civic improvement."

A rare combination of ecologist, artist, and explorer, Ward uses his photography to inspire people to protect nature and culture. He began his professional journey in the tropical rainforest of Africa and slowly made his way back to his beloved home state. With a camera in hand and love for nature in his heart, Ward is one of Florida's leading conservationists and brings national attention to the state's wildlife and ecology. He has helped preserve Old Florida and everything that it represents.

Ward's passion for preserving threatened wildlife and habitat inspired him in 2010 to create a nonprofit organization, Florida Wildlife Corridor, Inc. The organization advocates for public and private support for a contiguous and permanent network of lands and water that will allow threatened species, including the Florida panther, to roam unimpeded from North Central Florida to the Everglades National Park. The Corridor currently spans 15.8 million acres, of which only 9.5 million acres are protected. Ward and his organization are actively working to preserve the remaining 6.3 million acres. His work will help protect lands and waters that provide a home to 131 imperiled animal species and 69 imperiled plant species.

Ward combines conservation science with compelling imagery and rich storytelling to inspire citizens and civic leaders to protect and promote Florida wildlife. His unique communication skills allow him to influence people across the political spectrum. As an example, the Florida Legislature, in April 2021, **unanimously** passed the Florida Wildlife Corridor Act.



*Thanks to the efforts of conservationists like Ward, the native Wood Stork (*Mycteria americana*) was recently removed from the endangered species list. Photo by Carlton Ward Jr.*

The purpose of the act, and of the Corridor itself, is "to create incentives for conservation and sustainable development while sustaining and conserving the green infrastructure that is the foundation of Florida's economy and quality of life."

To understand the challenges facing Florida's flora and fauna, Ward has personally trekked more than 2,000 miles through the Florida Wildlife Corridor. His short film, *The Last Green Thread*, documents his travels and the rapid transformation of Florida's fragile wilderness. In March 2023, Ward released his first feature film, *The Path of the Panther*, which IMDB describes as, "A once-in-a-lifetime sighting triggers a deep dive into the uncharted world of the Florida Panther. It's a race against time—to reveal the unseen natural history of an icon surviving in an ancient ecosystem."

A native Floridian, motivated by eight generations of family heritage and a desire to popularize and protect the state's under-appreciated landscape and endangered species, Ward continues to fight for Florida today. The famed author Carl Hiaasen, one of south Florida's most influential voices, is also one of Ward's strongest supporters. Hiaasen writes, "Without its lush ranchlands, there would be precious little left to see of Old Florida, and nowhere for some of our most endangered wildlife to survive. Carlton's colorful tribute to this dwindling frontier is also a call to save what remains of it. The alternative is unthinkable."

The Garden Club of America awarded Ward the J. Sherwood Chalmers Medal for outstanding achievement in the field of photography and/or photography education as it relates to the purpose of The Garden Club of America.

Pine Barrens' Preserver, Conservationist, and a 2023 GCA Honorary Member

By Lucinda Mullin, South Side Garden Club of L.I., Zone III

GCA Honorary Member John L. Turner surveys the coast of Long Island Sound. Photo by Enrico Nardone, Seatuck Environmental Association

It started one winter morning as giant snowflakes fell over Long Island. Five-year-old John Turner sat looking out the kitchen window, when a flock of evening grosbeaks descended upon a newly installed bird feeder. Turner, who frequently enjoyed cardinals and blue jays, was transfixed by the grosbeaks' brilliant yellow and black plumage against the snowy background.

The grosbeaks and other birds Turner discovered that winter instilled a deep love of nature and set him on a lifelong journey to learn as much about it as he could. He spent countless hours watching birds, exploring the woodlands near his home, and voraciously reading books about nature.

By his mid-teens, Turner was an expert and worked as a part-time naturalist at a local nature center. There he befriended Bob McGrath and John Cryan, who shared his love of nature. The boys spent countless hours hiking, camping, and discovering Long Island's diverse natural areas. They often used a Hagstrom map—New York's "map of record"— to bushwhack through roadless areas in the Pine Barrens, a vast remnant of Atlantic coastal pine barrens covering more than 100,000 acres in eastern Long Island.

Turner developed a deep understanding of the Pine Barrens' unique habitats and wildlife and an appreciation for its critical role in protecting groundwater. At the same time, he grew concerned for the future. Familiar with the dense development that consumed the Hempstead Plains and most of western Long Island, he worried that the Pine Barrens would eventually suffer the same fate.

But even as a 20-year-old, Turner wasn't one to sit and worry. Showing early signs of the proactive approach that would define his career, he pushed for action. In 1977, he joined Bob McGrath and John Cryan to form the Long Island Pine Barrens Society and started educating Long Islanders about the ecological treasure at the heart of the island.

Over the next decade, the Society helped thousands of people, from children to elected officials, experience the wonder of the Pine Barrens and understand its importance. Eventually, the Society's focus shifted from education to activism as pressure to develop the region grew. Ultimately, their activism coalesced in the formation of the Pine Barrens Preservation Initiative. In 1992, their activism led to the passage of the Long Island Pine Barrens Protection Act and the permanent protection of more than 100,000 precious acres.

Turner launched the movement that would preserve the Pine Barrens while still in college. After graduating, he embarked on a 40-year career in environmental conservation; his resumé includes positions in both government and nonprofit organizations. Among other roles, he led conservation efforts for the Long Island

Chapter of the Nature Conservancy and the Town of Brookhaven. Since 2015 he has served as a conservation policy advocate at the nonprofit Seatuck Environmental Association, where he has led a range of projects—from saving Plum Island to protecting vernal pools to promoting water reuse efforts.

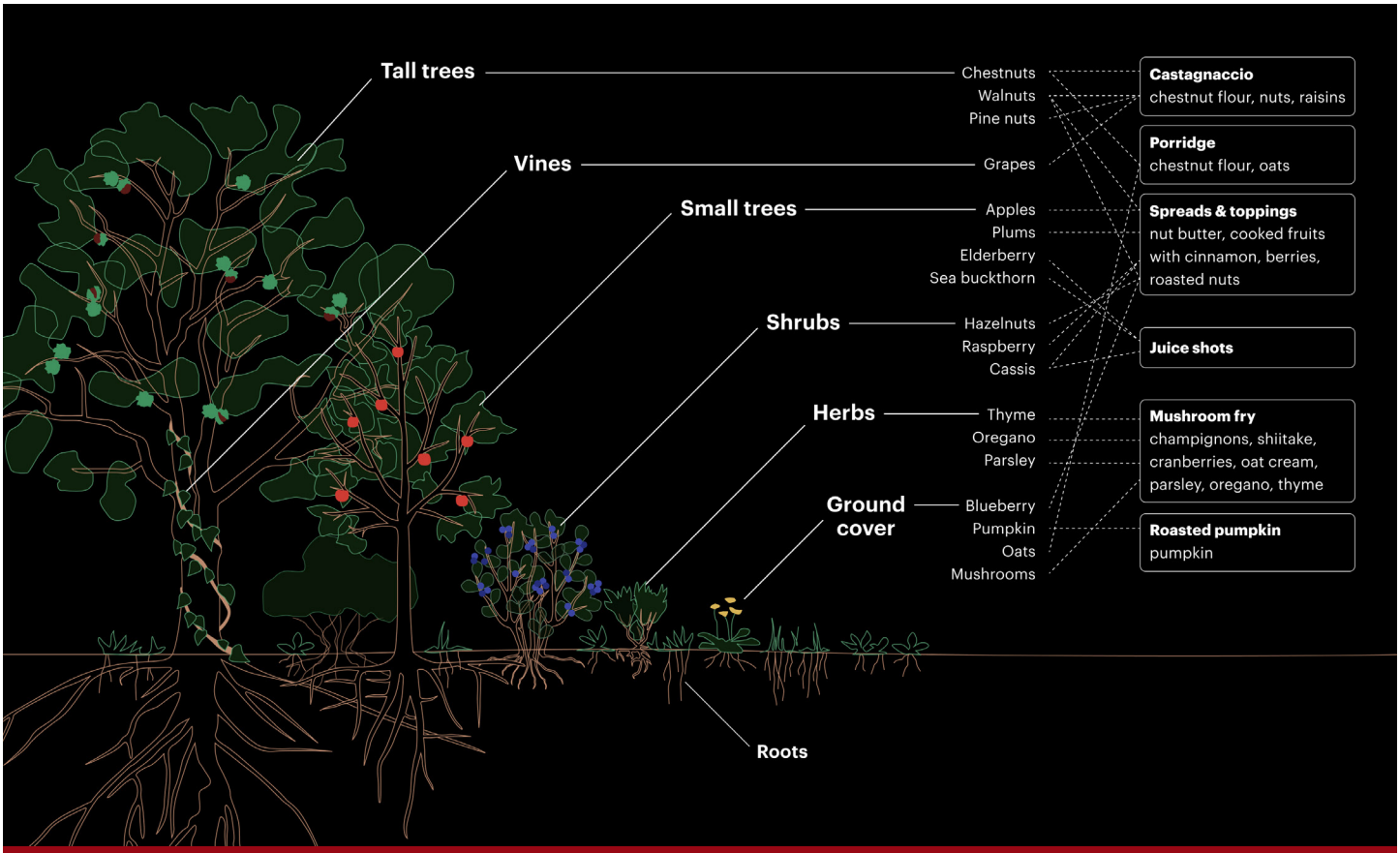
Throughout his career as one of the region's leading conservationists, Turner has maintained his love of nature, his joy in learning, and his willingness to share his knowledge. His contagious passion and his exceptional ability to connect with people and communicate science have made him a highly sought after speaker and popular leader of nature walks.

Enrico Nardone, the director at Seatuck, cherishes the opportunities he's had to be in the field with Turner. "There's nothing better," he said, "than being in the field with John, especially the Pine Barrens. The joy and passion he exudes is just contagious!"

In many ways, Turner remains like the five-year-old he was when his conservation journey started. He continues to carefully observe nature, eagerly and passionately share his joy with others, and do everything he can to help protect wildlife and conserve the natural world.

…even as a 20-year-old, Turner wasn't one to sit and worry. Showing early signs of the proactive approach that would define his career, he pushed for action. In 1977, he joined Bob McGrath and John Cryan to form the Long Island Pine Barrens Society and started educating Long Islanders about the ecological treasure at the heart of the island.

Native azaleas and rhododendrons bloom on a rocky outcropping of the Long Island Pine Barrens. Photo by Kent Mason



EAT THE FOREST OF THE FUTURE!

The Accenture team takes an office "forest breakfast" in Berlin, Germany. Photo by Tonie Nguyen

Facing page: *A breakfast spread, based on the layers of a forest garden. Illustration by Uli Siegmeier & Christine Eyberg, photo by Tonie Nguyen*

Thursday, October 6, 2033, 8:30 A.M.

After a refreshing morning cycle, you park your bike at the charging station on your office campus, under a beautiful oak tree. You walk through a small orchard of chestnut and walnut trees that the company planted 10 years ago. They have recently started to bear fruit, and some colleagues in rubber boots are busy picking nuts, berries, and mushrooms for today's breakfast…

Imagine what would happen if we all started planting forest gardens today. In 10 years' time, every building would have its own forest garden instead of a lawn. What would you like for breakfast?

The Future Forest Breakfast

What would it taste like to eat fewer cereals grown on large fields, and enjoy an abundance of nuts, berries, leaves, mushrooms, and roots?

We use this question to get ourselves and others excited about this future vision not just rationally, but also emotionally. To make it even more tangible, our Accenture team organized a "Future Forest Breakfast" in our office.

The rules were simple:

1. **Use food that can be grown in a small forest garden:** This means reducing cereals and dairy products, since they are hard to produce on a small scale and tend to have a higher environmental impact. This also leads you to look for interesting alternatives to carbs and protein.
2. **Use food that can be realistically grown regionally:** After all, we want to eat from a forest that grows right here, not across the ocean. In our case (Germany), this meant saying no to banana bread and avocado toast. Thinking ahead might also mean considering the effects of climate change on your region. You might even look for coffee alternatives—at your own risk!
3. **Go for biodiversity:** Try to include lesser-known or local cultivars of common fruits such as apples and less domesticated plants such as elderberry.
4. **Explain the concept:** We built a rather elaborate menu based on the seven layers of a forest garden (see image), but you can keep it simple. The key message should be that if we want to eat more chestnut cake in the future, we need to plant more chestnut trees today.

Make it yours

As you can see in the photos, our colleagues loved the mix of tasty snacks and bite-sized education. When dealing with sustainability and the future, we have a lot of information. But we still need to build optimism and shared visions. What better way to foster both than by eating together?

We hope you feel inspired to come up with your own version of a forest breakfast (tidal brunch, swamp dinner?) or other "future food" gathering. Feel free to share your ideas or questions with us via Instagram on *@eat_the_future*.

Uli Siegmeier, Nathalie Gröfke, Tonie Nguyen, and Christine Eyberg are sustainability advocates from Berlin, Germany who try to nudge people towards a more sustainable future through speculative experiences.

HELPING HUMANS SEE THE BEAUTY OF NATURE

Dynamic closeup shots give the viewer a magical new perspective on nature. All photos by photographer and filmmaker Louie Schwartzberg

By Floran Fowkes, Hancock Park Garden Club, Zone XII

Louie Schwartzberg, who claims that Mother Nature is his greatest teacher, is this year's recipient of the Elizabeth Craig Weaver Proctor Medal. In four-plus decades as a cinematographer, director, and producer, Schwartzberg has produced breathtaking images that help humans immerse themselves in the beauty of nature. As he notes, "Beauty and seduction are nature's tools for survival because we protect what we love." Throughout his career, Schwartzberg has helped nature thrive by helping us see it—and love it—more clearly. He has made the invisible visible, inspired awe, and given us a view of nature that we cannot see with our own eyes.

An award-winning film maker, Schwartzberg has pioneered the use of time lapse, high-speed, and macro-cinematography techniques to help us see what would otherwise be invisible. The title of his 2013 film, *Mysteries of the Unseen World*, could serve as a fitting description for his entire *oeuvre*. He illuminates everything from fungi to deserts to waterfalls to underwater worlds that help us see the natural world more clearly. He is also the only photographer who has continuously shot time-lapse film "24/7" for nearly five decades.

A child of holocaust survivors, Schwartzberg was born in Brooklyn in 1950. As a city kid, he did not experience nature firsthand, joking that his first "white water experience" was seeing popsicle sticks floating in the gutter. However, his parents—grateful for every blessing that came their way—instilled in him a sense of resilience and gratitude. Looking at the world through this lens, Schwartzberg knew from a young age that he wanted to make the world a better place.

Schwartzberg received a BA in 1972 from UCLA and an MFA from its School of Fine Arts in 1974. In fact,

Louie Schwartzberg's documentary, *Fantastic Fungi*, is a time-lapse cinematography masterpiece that's praised by critics and audiences alike. A fascinating journey, it will make you see mushrooms in a whole new light.

it was at UCLA that Schwartzberg picked up a camera for the first time, recording the protests over America's involvement in the Vietnam War. He fell in love with photography and realized he "had found his voice."

Lacking the resources to purchase new camera equipment, he took old cameras and reconstructed them. This led him into the field of time-lapse photography, which he turned into an art form. Nature became Schwartzberg's mentor—teaching him about light, composition, color, and movement. He realized that nature innately practiced conservation, "never taking more than she needed to survive." For him, Mother Nature's real story is "about relationships, partnerships, and ecosystems that flourish without greed."

Seduced by flowers—which he calls nature's greatest biological invention—Schwartzberg avidly studied the process of pollination. His 2012 film, *Wings of Life*, brilliantly reveals the fragile and almost magical relationship between flowers and their pollinator partners. Schwartzberg's sense of humor is evident when he refers to his film as a "G-rated sex film." Schwartzberg's heart and soul are dedicated to the wonder of nature, conservation, and the natural world we all inhabit.

In addition to illuminating nature, Schwartzberg is a renowned innovator in both the business and technology of film making. He is often credited with launching the contemporary stock footage industry. He founded the company Moving Art which pioneered high definition 2D and 3D film techniques. He also founded the company BlackLight Films that innovated large film formats to produce documentaries and children's programming.

With unparalleled skill, he has captured magical moments in his photographs, on film, and in digital displays that create experiences to inspire us. For him, viewing nature restores and promotes well-being. Schwartzberg's goal is to have us fall in love with nature and our natural world. And he completely succeeds.

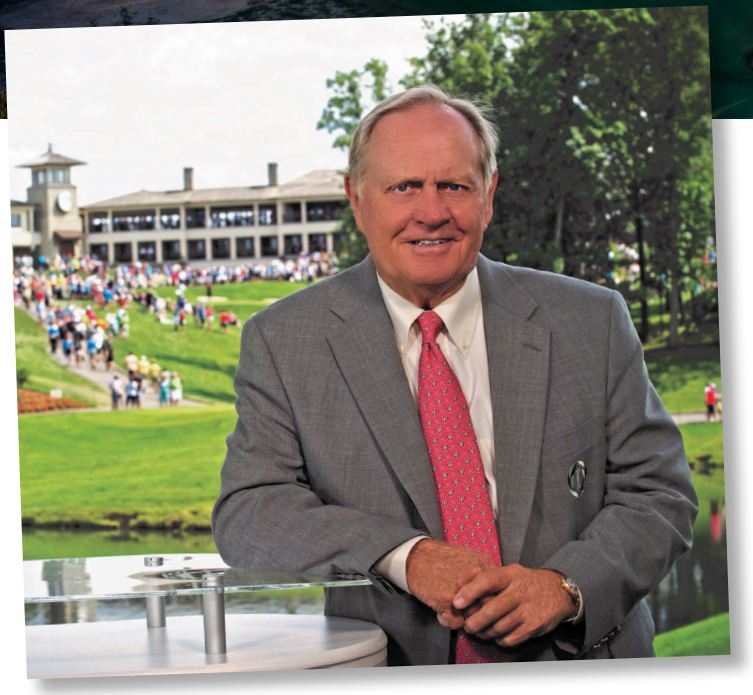
The Elizabeth Craig Weaver Proctor Medal is awarded for exemplary service and creative vision in any field related to The GCA's special interest.

Designing Golf Courses with the Environment in Mind

By Julie Johnson, Little Garden Club of Columbus, Zone X

Sebonack Golf Club in Southampton, New York, designed by Jack Nicklaus and Tom Doak. Photo courtesy of Sebonack Golf Club

Inset: *Frances K. Hutchinson Medal awardee and golf legend Jack Nicklaus*



Most of us know Jack Nicklaus as a golfing legend—winner of 73 tournaments, including 18 majors. But there's another way to characterize Nicklaus' impact on the world—an environmental champion who happens to be a very good golfer. It's for the latter achievements that we honor him as the 2023 recipient of the Frances K. Hutchinson Medal for distinguished service to conservation.

Nicklaus is celebrated as one of the greatest champions of any sport. He counts six Masters, five PGA Championships, three British Opens and two U.S. Amateurs among his titles. Less well-known is that he leveraged his winning record to become a great champion for the environment. Following his successful golf career, Nicklaus turned to course design. From the beginning he understood that a well-designed golf course protects soil, filters air, purifies water, and creates wildlife habitat which promotes biodiversity.

Many of the world's 37 million golfers—nearly 25 million of whom are in the United States—love not only the game but also the environment. They want to play golf but also to protect, conserve, and enhance the environment that nourishes the game. Jack Nicklaus and his company, Nicklaus Design, can take much of the credit for fostering this attitude.

An average 18-hole course in America covers 150 acres. Fairways take up about 30 acres; the rough often consumes 50 to 55 acres. Tees and greens account for three acres and 11 acres is typically dedicated to water bodies—ponds, wetlands, and streams. The remaining 50 acres are devoted to non-turf grass landscapes, including forests, woodlands, and grasslands.

Nicklaus believes in minimalist design—courses that require minimal artificial inputs, including fertilizers and plant-protective materials. A Nicklaus-designed course becomes sustainable on its own. Sustainability benefits the environment and is also less expensive to maintain. Nicklaus Design's goal is to let nature take care of itself with just a little assistance from the maintenance crew.

Nicklaus Design also has a strong record for reclaiming environmentally damaged land. **Old Works Golf Course** in Anaconda, MT, is situated on one of the largest Superfund sites in America. The site was a copper-smelting facility at the turn of the 20th century and had been abandoned for decades. Today, however, Old Works is such a good course that it's ranked as one of *Golf Digest's* 100 Greatest Public Golf Courses. It's such a brilliant environmental achievement that the Environmental Protection Agency wrote Nicklaus a personal letter, applauding his design efforts.

Similarly, **The Golf Club at Harbor Shores**, Benton Harbor, MI, is the centerpiece of one of the largest community revitalization projects in the country. Benton Harbor was once recognized as one of the poorest cities in America. Nicklaus Design built the course on land scarred by landfills, toxic waste, and abandoned factories. The project removed over 117,000 tons of trash, solid waste, and concrete from the site, including 20,000 tons of contaminated soils. That's one football field stacked up 65 feet or the equivalent of a seven-story building.

Sebonack Golf Club in Southampton, NY, another Top-100 course, is a collaboration between Nicklaus and Tom Doak. Constructed and maintained entirely through organic methods, Sebonack won the 2008 Environmental Stewardship Award from the Metropolitan Golf Association. The Neighborhood Network Organic Golf Project, a New York-based organization, which aggressively champions the cause of organic golf publicly, supported and even testified in favor of Sebonack's development in 2004.

If Nicklaus was a legend as a golfer, he's a visionary as an environmentalist. He sees the value of organic methods and sustainable solutions. He has built a team of design professionals who have shown the world that smart environmental design is a very good business model. He has invested his reputation in conserving and preserving the natural environment. For all this, he is a very deserving recipient of the Frances K. Hutchinson Medal.

The Frances K. Hutchinson Medal is awarded for distinguished service to conservation.

Protecting Coastal Ecosystems—Ohio Sea Grant and Ohio State University's Stone Lab

By Laura Billow Preston,
Akron Garden Club, Zone X

What do these three things have in common:

Dr. Seuss

Restaurant workers near Lake Erie

Contributors to harmful algal blooms?

The Ohio Sea Grant College Program (OSGCP) and The Ohio State University's Stone Lab have influenced and educated all three to protect and support healthy freshwater ecosystems. For almost 60 years—through research, education, and outreach—OSGCP and the Stone Lab have worked to solve the most important environmental issues in the Great Lakes region. From simple practices for boaters and beach goers to the intricate sciences of limnology, hydrology, and ecology, OSGCP is teaching people of all ages how to save our water resources for tomorrow.

The Great Lakes are an environmental treasure and a precious national resource, constituting 84 percent of North America's surface freshwater and 21percent of the world's supply of fresh water. How can we keep them healthy? OSGCP has introduced both the Ohio Clean Marina Program and the Marine Debris Awareness Training Guide for Restaurant Staff to educate waterside restauranteurs and boaters on ways to reduce pollutants near freshwater sources.

Harmful algal blooms are another threat to all the Great Lakes, but especially to Lake Erie, which is the shallowest of the five lakes. Researchers from OSGCP and the Stone Lab have identified best practices for manure storage, water treatment waste, and nutrient runoff prevention to ameliorate or prevent harmful algal blooms. As Chris Winslow, OSGCP's Director, noted, "This research is important for two reasons: number one, because there is a health risk and a responsibility to maintain a healthy ecosystem; number two, this research is important because it's really providing actionable information to help people change their behavior."

A heron looks over the Lake Erie Coastal Ohio Trail. Photo courtesy of National Archives Records Administration

Students at an OSGCP program even influenced Theodor S. Geisel—better known as Dr. Suess— to change some of the wording in his 1971 book, The Lorax. Dr. Suess originally wrote, "You're glumping the pond where the Humming-Fish hummed! No more can they hum, for their gills are all gummed. So I'm sending them off. Oh, their

future is dreary. They'll walk on their fins and get woefully weary in search of some water that isn't so smeary. I hear things are just as bad up in Lake Erie." Dr. Suess wasn't far off base in 1971. The Cuyahoga River that feeds into Lake Erie was so polluted that it had caught fire at least a dozen times. But then the OSGCP got involved and brought attention to the problem. By 1985, Ohio Sea Grant students could write to Dr. Seuss to tell him about the progress and asking him to drop the line, ""I hear things are just as bad up in Lake Erie." Happily, he agreed. In commenting on the progress, Chris Winslow noted, "I would argue that Lake Erie is one of the best stories of ecosystem recovery. When you have a body of water catch fire, that's typically not a good sign."

The United States Congress established the National Sea Grant College Program, a coalition of 34 universities, in 1966. Just as Land Grant Colleges, established in the 1860s to promote scientific methods to improve agricultural effectiveness, the Sea Grant College Program promotes ecologically balanced lakes and coastal areas that lead to healthy fisheries and thriving coastal communities. The National Oceanic and Atmospheric Administration (NOAA) manages and funds this unique partnership of academic, government, and private sector organizations. As an integral part of the national program, OSGCP's research is used by both NOAA and the EPA to address freshwater problems throughout the country.

OSGCP is located on the campus of The Ohio State University in Columbus, Ohio. The Stone Lab, established in 1895 on Gibraltar Island in Lake Erie, is OSGCP's primary research, education, and outreach facility. Each year, over 25,000 students, scientists, science writers, journalists, and elected officials, study and work at the Stone Lab to learn about critical freshwater issues and collaborate to find solutions.

View of Lake Erie from the bluffs at the David M. Roderick Wildlife Reserve. Photo by Nicholas T, Flickr

The Ohio State University Stone Lab received The Garden Club of America Zone X Conservation Commendation in 2019. Chris Winslow, director of Ohio Sea Grant, accepted the 2023 Margaret Douglas Medal, awarded for notable service to the cause of conservation education, at the 2023 GCA Annual Meeting in Columbus, Ohio.

Editor's Note:* ConWatch *readers may remember an* article in the Fall 2022 *issue about the use of floating wetlands to abate harmful algal blooms.

Sam Hodder

Committed Conservationist

By Missy Jensen, Carmel-by-the-Sea Garden Club, Zone XII

Sam Hodder, whose unofficial title is "Chief Enthusiast of the Outdoors," is a lifelong environmental champion and GCA 2023 honorary member. Raised in a GCA household, Hodder has dedicated his entire life to conservation work that mirrors the GCA mission. He began his career in college when he worked on trail crews for the Appalachian Mountain Club in New Hampshire's White Mountain National Forest.

Soon after college, he began a 22-year career with the Trust for Public Land (TPL). Hodder ultimately became TPL's state director, first for Maine, and later for California. He had a significant impact on both coasts. In the East, he helped to protect Maine's spectacular Katahdin Lake; in the West, he helped preserve open space around the iconic Hollywood sign. While at TPL, Hodder learned the importance of building strong partnerships with other nonprofits as well as with government agencies and indigenous communities.

GCA Honorary Member, ecologist, Coast Redwoods, and Giant Sequoia savior Sam Hodder. Photo by Paolo Vescia

"[Hodder]…has developed a network of committed conservationists whose roots and values are entwined to support lofty goals. Giant sequoias have unique interconnected root systems which lock together to support the whole community: the old encourage the young, the strong engage the weak, so that the trees can endure. The entire forest is designed to work together to withstand the forces of nature. As a mentor, Sam embodies this community support with his enthusiasm and inclusive leadership…"

—Jane Wiser, Orinda GC, Zone XII

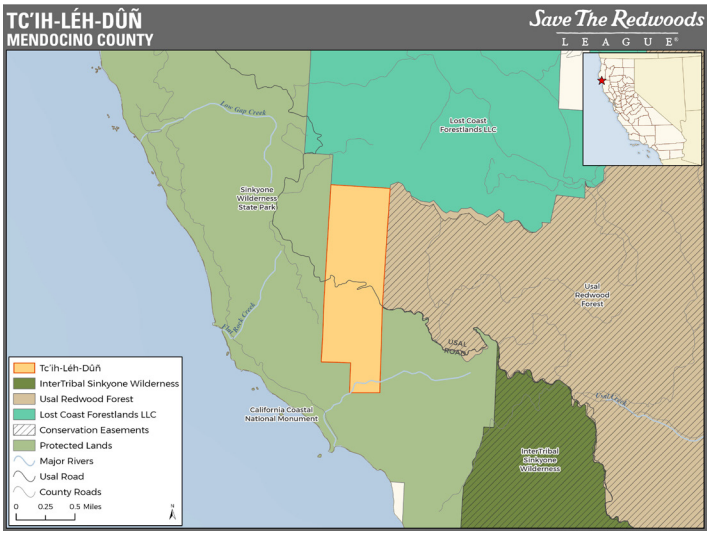
In 2013, Hodder took the helm of Save The Redwoods League (STRL)—a GCA medalist in 2018—which aims to improve "our collective understanding and appreciation of the redwoods." Almost immediately, Hodder and the STRL collaborated with the GCA on the successful Bridge the Gap campaign, which funded the purchase of the GCA Grove in the Humboldt Redwoods State Park. When the campaign surpassed its original fundraising goal, STRL and the GCA used the additional funds to restore the trails and bridges surrounding the GCA Grove.

In 2021, a stunning opportunity arose when STRL was invited to submit a bid to purchase a large parcel of land known as the Lost Coast in Mendocino County. This old growth and second growth redwood

forest had been managed for commercial timber but was suddenly for sale. Under Hodder's leadership, STRL rallied supporters to raise the funds needed in time to protect this ecological and cultural treasure.

For millennia, before they were forcibly removed, the Lost Coast was holy ground for the Sinkyone people. In a monumental move, Hodder led the STRL to return 523 acres to the Sinkyone Council. The forest will again be known as Tc'ih-Léh-Dûñ, meaning "Fish Run Place" in the Sinkyone language. Crista Ray, a board member of the Sinkyone Council said, ""Renaming the property Tc'ih-Léh-Dûñ lets people know that it's a sacred place; it's a place for our Native people. It lets them know that there was a language and that there was a people who lived there long before now."

In a very apt analogy, Jane Wiser of the Orinda Garden Club compared Hodder to a redwood forest. She wrote that he "…has developed a network of committed conservationists whose roots and values are entwined to support lofty goals. Giant sequoias have unique interconnected root systems which lock together to support the whole community: the old encourage the young, the strong engage the weak, so that the trees can endure. The entire forest is designed to work together to withstand the forces of nature. As a mentor, Sam embodies this community support with his enthusiasm and inclusive leadership, thus ensuring the future of the League and its efforts."



A map delineating territory purchased by STRL, part of the Lost Coast holdings, now renamed for the sacred area of the Sinkyone people. Image courtesy of the Save The Redwoods League

Sam Hodder and colleague survey part of the Lost Coast grove of old growth redwoods. Photo courtesy of Save The Redwoods League

As a descendent of GCA club members including a great grandmother, grandmother, and mother, Hodder is uniquely devoted to partnering with the GCA. He has spoken at club meetings, zone meetings, and an annual meeting. His leadership style fosters community and collaboration. And he's always willing to lead a tour of the redwoods and to explain the longstanding relationship between STRL and the GCA.

Through Hodder's generous collaboration with the GCA, we can see firsthand a charismatic hero who is helping us restore, improve, and protect the environment. At NAL 2023, he encouraged GCA club members to tell legislators that our forests and green spaces are more critical than ever, and that we can restore balance to the world by healing these special places. For his efforts, energy, and environmentalism, we are proud to make Sam Hodder an honorary GCA member.

Tracking for Bird Health—Stemming the Decline of Grassland Birds

By Matthew M. Webb, Aviation Ecologist and Motus Wildlife Tracing System Coordinator

Grassland birds are in trouble.

In North America, grassland birds range from southern Canada, through the center of the United Sates, and into northern Mexico—wherever grasslands are found. As farms and cities in traditional grassland areas have expanded, the grasslands themselves have disappeared. For example, only four percent of the tallgrass prairies in the United States still survive. As the grasslands disappear, so do the birds that depend on them. According to the U.S. Fish & Wildlife Service (USFWS), their numbers have declined by 53 percent.

Can we save the grassland birds? Multiple organizations, including the U.S. Fish & Wildlife Service and the National Audubon Society, are working in conjunction with land managers, farmers, and conservationists to learn how to conserve both the grasslands themselves and the birds that thrive there. A central set of questions revolves around geography and migration. Where are the birds? When and where do they travel? How have their migration patterns changed?

A Baird's sparrow equipped with a nanotag.

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To answer these questions, researchers often turn to the Motus Wildlife Tracking System, a worldwide project organized and managed by Birds Canada. Motus uses radio tags and automated telemetry to track wildlife over large distances. The traditional problem with telemetry is that it requires large numbers of receiving stations. Motus helps solve this problem by coordinating projects and sharing data so that multiple researchers working on different projects and tracking different animals can share the same receivers. The beauty of the system is that researchers can share resources rather than duplicating them.

Installing a Motus station at Cuenca Los Ojos' Rancho El Uno in Chihuahua, Mexico

The **Bird Conservancy of the Rockies** uses the Motus network to study the movements of grassland birds such as Baird's sparrow, Sprague's pipit, chestnut-collared longspur, and thick-billed longspur. Motus uses very small transmitter tags that are especially well-suited for tracking small birds or even insects. By attaching these transmitters to birds, Bird Conservancy researchers can track the movements of individual animals over long distances and across multiple habitats. This information is used to better understand migratory patterns, habitat use, and population dynamics of the species studied. This newly developed knowledge can ultimately inform conservation efforts and habitat management decisions.

Motus has allowed researchers from many different organizations to study the movements of birds, bats, and even some insects, and has resulted in over 125 scientific studies. Using Motus, scientists are gathering and sharing information to paint a picture of each bird species' unique migratory pathway. Since migration and conservation are intertwined, data collected can inform land management practices essential to healthy grasslands. It can also help us all understand how to protect these small and amazing creatures as well as the places they use throughout the year.

About Bird Conservancy of the Rockies: Motus helps many different agencies and organizations understand and support grassland birds. One of these is the Bird Conservancy of the Rockies, an environmental non-profit whose mission is to conserve birds and their habitats through science, education, and land stewardship. To learn more, please visit birdconservancy.org.

A Bird Conservancy of the Rockies scientist placing an avian nanotag on a grassland bird. These nanotags will help fill crucial knowledge gaps for these birds to help inform conservation decisions. All photos courtesy of Bird Conservancy of the Rockies

Green Architect and Environmentalist—
Bob Berkebile

By Nancy Lee Kemper, The Westport Garden Club, Zone XI

The Deramus Education Pavilion at the Kansas City Zoo, an AIA top ten project by Berkebile Nelson Immenschuh McDowell Architects. Photo courtesy of BNIM
Inset, above: *Bob Berkebile wanders through a native grass field in the Kansas Flinthills with member of The Westport Garden Club, Kathy Gates*

Robert J. "Bob" Berkebile, an honorary member of the Westport Garden Club and an internationally recognized architect who understands the connections among economic, aesthetic, social, civic, and environmental needs, is this year's recipient of the GCA's Cynthia Pratt Laughlin Medal. Berkebile understands that design is a community process that involves much more than bricks and mortar. A powerful advocate for sustainable design, he listens closely to people from all walks of life. Just as importantly, he listens closely to nature in all its manifestations.

Berkebile is a living example of John Muir's classic wisdom. "When we try to pick out anything by itself, we find it hitched to everything else in the universe." A student of Buckminster Fuller, Berkebile recognizes that every element of "spaceship earth" is tightly intertwined with every other element. He thinks across silos rather than in any one silo. A gifted communicator, he can persuade

Cynthia Pratt Laughlin Medal for outstanding achievement in environmental protection and the maintenance of the quality of life.

Main Street, Greensburg, Kansas. Redesigned by Berkebile's firm after being leveled by a severe tornado, Greensburg is often called the "greenest" town in America. Photo courtesy of BNIM

people from different disciplines to work together for the common good. As an architect, he designs sustainable buildings. As a civic leader, he designs environments that enhance community vitality.

As numerous nominators noted, Berkebile does not rest. He was instrumental in creating many organizations and standards that design professionals use every day. These include the highly influential Committee on the Environment (COTE) within the American Institute of Architects. He also helped launch the Green Building Council, the LEED Standard, and the Living Building Challenge. He has worked on several "greening" projects, including the Greening of the White House, of the Grand Canyon, of Yellowstone, and of the Pentagon.

Not content to build new things, Berkebile also dedicates himself to restore and revitalize communities that have been devastated by natural disaster or blight. In 2007, after the town of Greensburg, KS, was leveled by a severe tornado, Berkebile created a master plan to renovate the community into a model "green town." Today, Greensburg is often described as the greenest town in America. Berkebile has helped lead recovery efforts in 11 other disaster-struck communities, from Houston, TX to Tuscaloosa, AL.

Berkebile recognizes the progress achieved in reducing urban carbon emissions, but believes we have not yet done enough to sequester the carbon already released. As co-director of the Foundation for Regeneration (FfR), he is helping to develop the Urban Ecosystem Standard (UES), a collaborative effort that aims to create a method for determining when urban ecological interventions are needed. UES would also track outcomes and benefits of ecological interventions and help cities measure their progress against climate action plans.

In addition to FfR, Berkebile co-founded Good Oak, a land management company that helps farmers and ranchers convert their properties into regenerative operations. Regenerative farmers work with nature to create healthier food with fewer inputs and to sequester carbon while replenishing their soil.

Both FfR and Good Oak are working with the Blue River Valley Industrial Corridor to help heal the Blue River, which drains some two-thirds of all the water in the Kansas City region. As with so many other Berkebile-led projects, the Blue River initiative brings together multiple organizations with diverse perspectives. The goal is to improve both the competitiveness and the sustainability for the Blue River Valley, while integrating industry, community, and nature.

Berkebile's community process—a collaborative dialogue of discovery—is an essential component of his work as an architect and an environmentalist. He continues to live every day with the belief expressed by Pierre Teilhard de Chardin: "The future of the Earth is in our hands." Berkebile adds a sense of urgency: "The future of our children is also in our hands, and they are far more at risk than the Earth."

In the Clymer Meadow Preserve in Texas, the use of prescribed fire has contributed to a 25 percent increase in native wildflower species. Photo by Charlotte Reemts

WHO KNEW? Can we use prescribed fire to keep tallgrass prairies diverse?

The North American tallgrass prairie once stretched from coastal Texas to southern Canada, creating a thriving habitat for bison, deer, quail, monarch butterflies, and thousands of other species. It is called "tallgrass" because its main grasses—big bluestem, little bluestem, switchgrass, and Indiangrass—can grow to eight feet in height.

Fire, caused by lightning or by people, has always shaped the tallgrass prairie. Indigenous peoples used fire to attract bison, manage plants for food and medicine, and make travel easier. Together with large herds of bison, elk, and deer, these fires created a diverse and dynamic grassland in a region that gets enough rainfall to be a forest.

Today, more than 90 percent of the tallgrass prairie has been converted to row-crop agriculture and other uses. Most of the remaining old-growth prairie is in small, isolated remnants that have never been plowed. We can restore prairies on retired croplands and pastures. Restored prairies help to increase habitat for grassland-loving birds and pollinators.

Prairie managers use multiple tools to preserve and promote biodiversity in both restored and old-growth prairies. Such tools include prescribed fire, mowing, haying, and careful use of herbicides. I am looking at prairies from Texas to Minnesota to see if we can use prescribed fire to increase or at least maintain all the plants present in those prairies.

While fire is critical to maintaining prairies, fires can also harm some species. Timing is important. Winter or early spring fires can kill insects that overwinter in plant stems or in the dead litter on the ground. Autumn fires can knock back the dominant tallgrasses, while early summer fires may burn up the seeds of spring wildflowers.

Prairie managers must also balance differing goals when using prescribed fire. To create forage for cattle grazing, for instance, they need to burn in the spring. To maximize safety, on the other hand, managers may choose to burn in the winter or early spring. In contrast, prairie fires before European colonization burned in many seasons. Lightning fires were often started by summer

New growth peeks through the carbon char after a controlled burn. At Clymer, The Nature Conservancy started using prescribed fire in the 1980s. Photo by Charlotte Reemts

thunderstorms and indigenous peoples used fires in all seasons.

For my research, I will compare different fire strategies. Is it better to burn on set schedules—say, every two years, always in the spring—or to burn in different seasons and on varying schedules? One hypothesis is that prairies that are always burned in the same season will gradually lose the plant species that are vulnerable to fire at that time. In contrast, I predict that prairies burned in different seasons will have more plant species because staggering the schedule allows multiple species to co-exist. I also predict that burning different parts of the same prairie in different seasons will support more plant species compared to burning the whole prairie in the same season.

Multiple factors influence how prescribed fires affect both remnant and restored prairies. One such factor is grazing: cattle and bison both love freshly burned areas. As grasses and wildflowers resprout after a fire, plants need time to build up the chemicals and other defenses that they use to protect themselves from grazers. This tender new growth is more nutritious and easier to digest for the cattle or bison. To make specific management recommendations, I will compare the effects of fires and seasonality on both grazed and ungrazed prairies.

Link to video on The Nature Conservancy website: Clymer Meadow serves as center for study of the Blackland Prairie. Go to: **LAST OF THE BLACKLAND (2:10)**—that intrinsic link between quintessential Texas and the landscapes that once thrived across our great state.

I will also compare the effects of fire in old-growth prairies and restored prairies. Restored prairies may no longer have the specialist plants that evolved in old-growth prairies. Since the overall number of species can be lower, restored prairies may react very differently to prescribed fires than do old-growth prairies.

I am in the early stages of my project, working with collaborators from many states and organizations to collect information. However, I have done preliminary analyses using data from the Clymer Meadow Preserve in Texas. At Clymer, The Nature Conservancy started using prescribed fire (and sometimes grazing) when they first bought the prairie in the 1980s. The number of wildflower species has increased by around 25 percent since measurements started in 1996. This increase seems to be linked to the variety of fire seasons.

Once my project is completed, I plan to share my results with prairie managers. The prairies that we have left are essentially little islands of native habitat. I hope that my research will help managers preserve, protect, promote, and expand these islands for future generations.

—Charlotte Reemts, Ecologist and Science Project Director, The Nature Conservancy, Graduate Student, The University of Texas at Austin. Charlotte Reemts received a 2022 GCA Fellowship in Ecological Restoration for her research, "Does Long-Term Pyrodiversity Increase Plant Diversity in a Tallgrass Prairie?"

*Diverse prairies are vital to the survival of native pollinators like the American bumblebee (*Bombus pensylvanicanus*) here, visiting green milkweed. Photo by Charlotte Reemts*

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The purpose of The Garden Club of America is to stimulate the knowledge and love of gardening, to share the advantages of association by means of educational meetings, conferences, correspondence, and publications, and to restore, improve, and protect the quality of the environment through educational programs and actions in the fields of conservation and civic improvement.