ConWatch

The Garden Club of America • Summer 2022

CONSERVATION HEROES ISSUE

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FROM THE EDITOR

Marjory Stoneman Douglas said, "You can't conserve what you haven't got." Wise words from one of my conservation heroes. Douglas's writings and staunch advocacy for the Everglades exemplify many heroic traits—ingenuity, courage, strength, concern for others, and ceaseless energy.

Conservation heroes are the guardians of our planet. They work on behalf of oceans, animals, forests, rivers, sea life, and every aspect of nature.

This ConWatch issue showcases important guardians of the planet, as recognized by the GCA in 2022. Discover James Porter's work to save coral reefs. Read about how Carlton Ward Jr. uses his photographic skills to help create a Florida wildlife corridor. And read how Julie Packard's work at the Monterey Bay Aquarium fosters ocean research, advocacy, and conservancy. You will also discover the heroes behind a new urban park, the photographer who combines photography with conservation advocacy, and the attorneys who take nature as their client.

Conservation heroes touch our hearts. They never fall out of love with oceans, parks, land, wilderness, and nature. They inspire us.

As you read this issue, I hope that you too will be inspired to act on behalf of nature.

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

News from the Conservation and NAL Committee



There are conservation heroes among us and have been throughout history. Heroes like Theodore Roosevelt, John Muir,

Rachael Carson, Aldo Leopold, and E.O. Wilson. There is also the neighbor down the street who saved a colony of native bees or an historic tree. Another conservation hero is a GCA club that uses its power for community outreach and environmental stewardship. There are GCA Scholars who are, and will be, changing the world one step at a time.

The GCA has 10 position papers that are updated every two years to reflect the most current thoughts and approaches to conservation. They give each one of us the opportunity to be a Conservation Hero, as we work to bring clubs together to cultivate the bond among people, plants, and the environment to produce informed volunteers working for a beautiful, healthy planet. This issue is dedicated to just such heroes, read and you will see that there are conservation heroes everywhere!

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

Banner: Rocky Mountain National Park. Photo courtesy of Suellen White

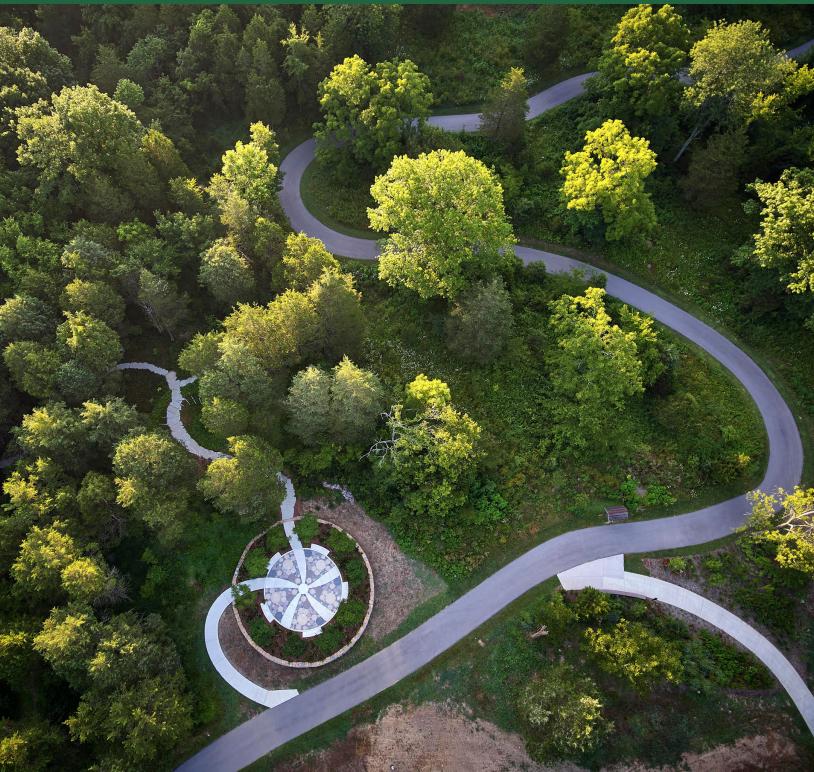
Cover photo: Conservation heroes Carlton Ward Jr. and Joe Guthrie navigate a kayak through the Florida Everglades. Photo courtesy of Carlton Ward Jr.

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

The Parklands ofFloyds ForkA Conservation Hero and
Model for Urban Parks

By Margaret Barlow, Glenview Garden Club, Zone VII

Aerial view of the Kentucky Coffee Tree Rondel, Moss Gibbs Woodland Garden in Broad Run Park, The Parklands of Floyds Fork. Photo by Bob Hower, Quadrant Photography





With Louisville's boundaries extending well beyond the existing necklace of Olmstedian parks and parkways... what could the present generation do to have the same impact in 100 years as the Olmstedian generation? —Susan M. Rademacher Susan Rademacher poses an important question. How can a city like Louisville, Kentucky—or any other city that benefits from an Olmstedian inheritance—build on and extend that legacy? The answer for Louisville is The Parklands of Floyds Fork. The story behind The

Parklands can serve as an inspiration and example for every other Olmstedian city.

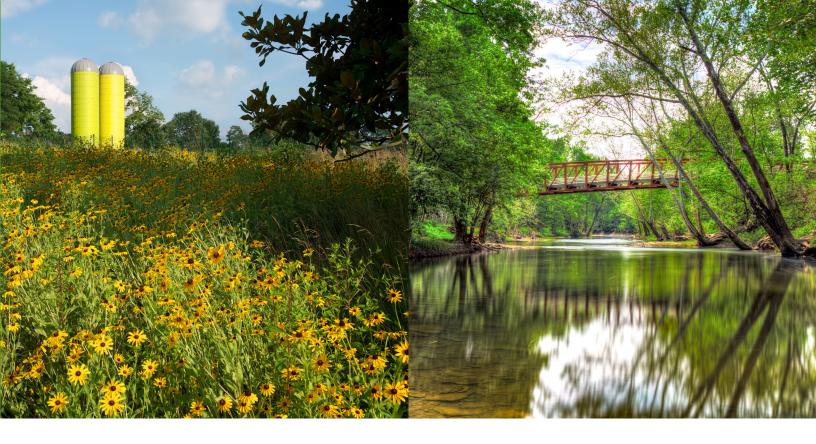
The Parklands of Floyds Fork is a 20-mile, 4,000-acre addition to the Louisville Park System. It protects and enhances landscapes for countless species of native plants and animals. The list includes almost 40 trees and shrubs, 25 species of reptiles and amphibians, over 40 species of fish, 20 species of rare freshwater mussels, the endangered gray and Indiana bats, 19 species of mammals, 138 species of birds, and over 450 species of native plants, including the endangered Kentucky Glade Cress.

While The Parklands is clearly good for plants and animals, it's firmly based on the Olmstedian belief

that parks are for people. Supporting a broad range of activities from hiking, biking, fishing, and paddling, to playing, learning, and picnicking, The Parklands brings the community together in the embrace of nature. It is a perfect example of park and urban planning designed for future generations and is one of the largest donor/visitor supported public park systems in the country. It's also an exceptional example of Frederick Law Olmsted's design principles.

Designers planned The Parklands to extend and enhance Louisville's existing Olmsted park system, combining greenways, trails, and parklands. Between 2012 and 2016, The Parklands opened four major parks linked by a continuous drive. In a nod to Olmsted, each park has its own personality. Each is named after a tributary of Floyds Fork, a 27-mile-long stream that unites the parks. Paddling is one of the best ways to see the restored wetlands and stream banks and explore the river ecosystem.

During construction, planners focused on conserving and restoring plant and wildlife habitats, while also creating outdoor educational experiences for park visitors. Innovative water and soil management techniques improved environmental quality, integrity, and



sustainability. Restoring the tributary streams has had the most profound impact.

In addition, designers developed a long-term plan for managing and sustaining native Kentucky resources ranging from mature forests, oak savannas and meadows, to streams and riparian corridors. Planners used a 100year focus, considering trees of the past and present, and produced a diverse plant and animal environment that will serve multiple generations.

The Parklands of Floyds Fork extends Olmsted's legacy into the 21st century. It has become a place where our community gathers to seek refuge from the day-to-day. It includes the 19-mile Louisville Loop and an estimated 100-mile multiuse trail system that will eventually encircle the city. It will link parks and neighborhoods to civic attractions, transportation alternatives, and recreation

This visionary enterprise resulted in our country's most notable new park of the 21st century to date and is a remarkable achievement. —Betsy Barlow Rogers opportunities. Additionally, a robust educational program centers around outdoor exploration and hands-on discovery.

The Parklands has served as an essential respite for citizens weary of lockdowns, restrictions, and other stresses. It is proving to be a well-used and well-loved community resource. It also protects and enhances the community. Its green infrastructure provides multiple benefits, including transportation, flood mitigation, habitat protection, as well as health, education, and cultural enrichment. The Parklands has succeeded in creating accessible natural and cultural resource areas, while preserving historic sites and sensitive areas for wildlife habitat. It's a wonderful community resource and a shining example for the rest of America.



The Parklands of Floyds Fork was awarded the Cynthia Pratt Laughlin Medal for outstanding achievement in environmental protection and the maintenance of the quality of life.

Photos above, L to R: A lone biker explores a path through The Parklands of Floyds Fork. Photo courtesy of Quadrant Photography

Map courtesy of The Parklands at Floyds Fork.

The design for Parklands incorporates existing farm infrastructure such as these former grain silos. Photo by John Nation

Scenes like this reveal the Olmsted influence in the design of The Parklands at Floyds Fork Photo, Bob Hower

"I don't know the ingredients of obsession. Maybe it's the chance of trying to do something that seems impossible."

GCA Honorary Member, conservationist and wildlife photographer Carlton Ward Jr. in his "natural habitat." Photo by Veronica Runge

Passionate Conservationist: Carlton Ward Jr.

By Susan Smathers, Late Bloomers Garden Club, Zone VIII arlton Ward's words epitomize the determination of one of the world's preeminent conservation photographers. Ward's drive for excellence as a photographer is matched only by his passionate calling as a conservationist. These qualities have made him one of the great photographic chroniclers of wild Florida.

An eighth-generation Floridian—descended from a pioneer ranching family—he is an award-winning photojournalist whose images have been exhibited widely and published in magazines as diverse as Audubon, Smithsonian, Outdoor Photographer, Geo, Africa Geography, Nature Conservancy, Popular Photography, World Wildlife Magazine, and The Guardian, as well as numerous articles in National Geographic Magazine. After completing a master's degree in ecology at the University of Florida, Ward undertook six expeditions to Gabon with the Smithsonian Institution. The result was his first book, *The Edge of Africa*, and an exhibit at the United Nations in 2003.

Florida Wildlife Corridor

Ward later wrote, "After spending years exporting an ethic of environmental stewardship to a developing African nation," his heart led him back to the Florida ranchlands of his heritage. Thus, he began his quest to visually document not only the state's ranchlands but also the length and breadth of what would soon become known as the Florida Wildlife Corridor.

In 2012, Ward undertook the Florida Wildlife Corridor Expedition, a thousand-mile trek from the Everglades to the Okefenokee Swamp in southeast Georgia. In 2015—by now a Fellow of The Explorers Club—Ward also became a "Rolex Artist in Exploration" to commemorate a second thousand-mile trek through Florida. He travelled by foot, paddle, and bike through Florida's vast and seldom visited "Forgotten Coast." The two expeditions drew attention to a wildlife corridor knit together from public and private lands and launched a campaign to "Keep Florida Wild."

Since 2016, "The Path of the Panther Project" has been Ward's full-time focus. To capture the reclusive panther's wanderings, Ward and his team installed a network of camera traps in the remotest reaches of the Florida Wildlife Corridor—an arduous task involving waist-deep waters infested with alligators and snakes.

Equally impressive is Ward's ability to galvanize a political movement to save the Florida panther and, more broadly, the imperiled Florida Wildlife Corridor. Due in





The elusive Ghost Orchid, a native of the Florida Everglades. Photo by Carlton Ward Jr.

no small part to his tireless advocacy, both houses of the Florida Legislature *unanimously* passed the Florida Wildlife Corridor Act in the spring of 2021. The Act protects 17.9 million acres of green space, with provisions to prevent habitat fragmentation, safeguard clean air and water, shield agricultural lands from development, and allow for continued recreational access to natural areas. The Corridor protects national parks, state forests, rivers, and streams as well as privately owned ranchlands and timberlands. Connecting the state's fragile green infrastructure allows wildlife to roam freely—and would not have happened but for Ward's visual artistry and verbal eloquence.

Ward's activism is multifaceted. He founded the Legacy Institute for Nature & Culture (LINC), a nonprofit group advocating for the protection of Florida's natural and cultural heritage through art. He also created the International League of Conservation Photographers (iLCP) to support environmental and cultural conservation through ethical photography and filmmaking.

Ward has won numerous awards, including the "Conservation Leadership Award" from the Fish and Wildlife Foundation of Florida (2015), "Florida Icon" by *Florida Trend Magazine* (2016), and "Wildlife Photographer of the Year" from the Natural History Museum of London (2019). *Popular Photography* magazine named him one of three "photographers working to save the American landscape." Since 2011, he has also received four coveted grants from the National Geographic Society, including most notably, its "Last Wild Places Grant" for the Path of the Panther Project (2020).

The GCA Honorary Membership portfolio included letters from The National Geographic Society, the Nature Conservancy of Florida, the International League of Conservation Photographers, and White Oak Conservation. All gave their unqualified support and described their delight at working with such a talented and committed conservationist. The nomination was seconded by The Garden Club of the Halifax Country and was additionally supported by letters from members of Grass River Garden Club, Founders Garden Club of Sarasota, Jupiter Island Garden Club, and Woodside-Atherton Garden Club, Woodside, California.

In photographing the shrinking ancient canopies that used to extend all over the southeast—and the panther that used to range throughout the entire region—Ward has brought attention to the raw beauty of Florida's heartland and the rapid loss of our natural heritage. His voice and visuals convincingly urge us to protect it.

Carlton Ward Jr. was awarded Honorary Membership in the Garden Club of America in May 2022.



A Black Bear makes its way through Bald Cypress and ferns in the Florida Everglades. Photo, Carlton Ward Jr.

Nature's Attorney: Southern Environmental Law Center

By Eliza Vellines Phillips, The Garden Club of Wilmington, Zone V

Sarah Francisco grew up on her family's farm in Virginia's rural Shenandoah Valley. When the Atlantic Coast Pipeline was announced, it hit close to home. The methane pipeline's original route cut near her family's farm and across the George Washington National Forest. Francisco, a lawyer for the Southern Environmental Law Center (SELC), had spent much of her career advocating for greater forest conservation. SELC and local groups in the path of the pipeline decided to fight back.

Over a six-year campaign, a team of SELC attorneys challenged permits that would have allowed the pipeline

to cut through the national forest, cross under the Appalachian Trail, harm rivers, streams, key habitat, and increase air pollution. The team also showed that the pipeline was entirely unnecessary, revealing its shaky foundations.

Throughout, SELC represented 15 organizations and collaborated with many allies. After facing years of coordinated pushback, pipeline developers abandoned the proposal in 2020. Francisco summarized SELC's work succinctly: "We do work that really matters. We hold ourselves to a high standard, we're getting results, and I know that Virginia and the South are better places today because of the work SELC does."

The Southern Environmental Law Center

Francisco's work is emblematic of the issues that SELC takes on. Led by Executive Director Jeff Gleason, SELC's 200 staff members—including 100 attorneys—work across Virginia, North Carolina, South Carolina, Georgia, Alabama, and





Members of SELC's Atlantic Coast Pipeline legal team on the steps of the Supreme Court. Photo by Stephanie Gross

Tennessee to protect clean air and clean water, preserve natural treasures, and provide a healthy environment for all.

Too often, environmental laws are not enforced effectively and do not adequately protect human health. The Environmental Protection Agency (EPA) and state environmental offices are often woefully understaffed yet face powerful lobbying efforts that could undermine decades of progress.

SELC, the largest nonprofit, nonpartisan environmental organization in the South, is rooted in this region and getting results with national impact.

Often described as a Swiss Army Knife, SELC knows that it takes many tools to protect our environment.

It uses a savvy combination of legal acumen, partnerships, public engagement, communications, and scientific and technical expertise to deliver results. SELC sets precedents from state courthouses to the Supreme Court and shapes policies to protect the land and the people of the South.

Supporting Communities

SELC's work extends beyond the courtroom, empowering community groups. In the case of the Atlantic Coast Pipeline, SELC worked closely with residents of Union Hill, Virginia—a community in Buckingham County founded by formerly enslaved people after the Civil War—to overturn a permit for a compressor station that would have created dangerous levels of air and noise pollution.

Similarly, SELC worked with Memphis residents and partners to oppose the Byhalia Pipeline, which was cancelled in 2021. The crude oil pipeline would have crossed through historic black neighborhoods and



A natural gas pipeline tears through pristine farmland. Stock photo

placed the city's drinking water at risk of groundwater contamination. SELC continues to work with two local partners, Memphis Community Against Pollution and Protect Our Aquifer, now turning their attention to other nearby industrial sites.

Ash, Arsenic, Lead, and Mercury

For more than a decade, SELC has worked to clean up coal ash pits that leach into the South's waterways. The waste byproduct of burned coal, coal ash contains toxins like arsenic, lead, and mercury that are recognized carcinogens affecting the nervous system, heart, and lungs.

Employing state and federal clean water laws and its Swiss Army Knife approach, SELC and its partners are forcing utilities to clean up over 250 million tons of coal ash across the region. For example, in North Carolina, SELC and its clients reached a historic settlement in 2020 with the North Carolina Department of Environmental Quality and Duke Energy for the country's largest coal ash cleanup.

"North Carolina's communities will be safer, and North Carolina's water will be cleaner than they have been in decades."

-Frank Holleman, SELC Senior Attorney

Today, SELC develops policies that promote clean energy and sustainable economies. In 2020, SELC and its partners championed the passage of the Virginia Clean Economy Act and related laws, making Virginia the first Southern state to join a multi-state initiative to reduce carbon pollution from power plants. In North Carolina, SELC is working to create a fair playing field for independently owned solar farms. And through an innovative rate design deal with Duke Energy, SELC advocated for fair compensation for homeowners installing rooftop solar panels.

Changing Climate—Changing Coastlines

As climate impacts escalate in coastal communities, SELC is developing innovative tools to help residents and municipal planners adapt. SELC recently released **The Changing Coast** interactive mapping website, created by their own geospatial and coastal experts, to show how climate change is reshaping the Southern coast.

The map includes a Social Vulnerability Index that helps planners identify neighborhoods with a higher risk of being damaged by weather disasters. This information is invaluable. For example, in Charleston, the map reveals that a proposed development of 9,000 units could soon be under water.

Alliance for Advocacy

As part of their shared commitment to environmental protection, SELC and the GCA have an extensive history. In 2013, the GCA awarded SELC Founder Rick Middleton the Cynthia Pratt Laughlin Medal. Jane Goedecke, Awards Committee Chair, commented that "Rick has had a transformative impact on the protection of the Southeast's special natural places and wildlife, and also on the strength and effectiveness of the nonprofit organizations that work to conserve them."

GCA members embraced the founding of SELC. When Middleton, then a newly minted Yale lawyer, shared his vision for creating SELC to protect the natural resources of the South, GCA club member Sarah "Sally" Shallenberger Brown provided financial support. Brown—who was a leading advocate for the expansion and permanent protection of the Arctic National Wildlife Refuge—crusaded for the Surface Mining Act and championed environmental protection across the South. Brown family members have sustained her legacy by continuing to lead in both the GCA and SELC.

SELC serves as a model for environmental advocates to leverage the power of the law to protect the environment. The GCA looks forward to continuing a rich and successful alliance.



GCA Medalist Julie Packard at The Monterey Bay Aquarium. All photos by Tyson V. Rininger @Monterey Bay Aquarium

Julie Packard: Ocean Advocate and Activist The GCA 2022 Margaret Douglas Medal Recipient

By Susan Uydess, Carmel-by-the-Sea Garden Club, Zone XII

JULIE PACKARD AND HER FAMILY

founded the world-renowned Monterey Bay Aquarium in 1984. As Executive Director and Vice-Chair of the Board of Trustees, she has elevated the Aquarium to the highest standards of ocean conservancy and educational excellence. Packard's vision for the Aquarium includes research, advocacy, and education—a brilliant combination that has yielded significant advances in oceanography, climatology, and public awareness.

In addition to its groundbreaking research, the Aquarium is simply a delightful place to visit. Seawater exhibits use local marine life to engage visitors both young and old. Highly educated volunteers answer questions ranging from the elementary to the deeply insightful. What do sea urchins like to eat? If the oceans warm up, will new fish evolve? School children and their chaperones are welcome to visit—free of charge—to learn more about ocean life and conservancy. Packard has inspired thousands of young people to learn about oceans, including the beauty of underwater life as well as the challenges of ocean pollution.

Under her leadership, the Aquarium has provided permanent exhibits as well as special temporary exhibitions. Recent exhibits have included everything from great white sharks to sea horses to jellyfish. The newest exhibit, *Into the Deep*, opened in April 2022 with a mesmerizing display of deep-sea animals that had never been seen previously in a public setting.

The Aquarium is also home to the innovative Sea Otter Program that allows specially trained Aquarium staff and volunteers to rescue stranded sea otters for in-house rehabilitation. The process includes a carefully orchestrated program of medical treatment, nutritional sustenance and—for pups—a surrogate adult to teach them how to forage for food and socialize with other sea otters. Once rehabilitated, the sea otters are released back into the wild.

In 1999, the Aquarium began the consumer-focused Seafood Watch[®] program to encourage people to purchase sustainable seafood from local fisheries that do their best to avoid harming marine habitats. Consumers can use color-



The Kelp Forest exhibition at the Monterey Bay Aquarium

coded wallet cards or cell phone apps to easily identify sustainable seafood in stores such as Safeway, Whole Foods, Target, and Walmart. Updated annually, the cards and apps identify fish to avoid and suggest popular substitutions.

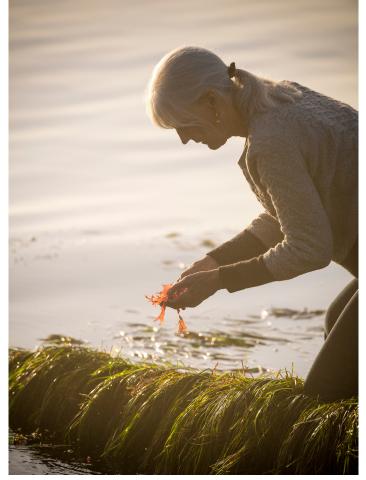
Packard clearly understands how various consumer products can negatively affect marine habitats. She has spearheaded legislation to restrict or ban single-use plastics including bags, drinking straws, disposable food containers, and eating utensils. She also works to reduce the threat of plastic microbeads found in personal care products, plastic six-pack carriers, filter cigarette butts, and even balloons. Microbeads don't break down in the environment and have been ingested by birds, turtles, fish, and other ocean inhabitants with disastrous effects.

The Monterey Bay Aquarium is a founding partner of the highly respected Aquarium Conservation Partnership, a consortium of some two-dozen public aquaria and zoos. Packard has inspired members to eliminate plastic products from their retail venues. Her influence and guidance have helped other aquaria create diverse programs and exhibits and raise awareness of important conservation efforts.

Aquarists, scientists, and conservationists from all over the world come to Monterey to visit the Aquarium and learn cutting-edge techniques in animal care, ocean conservation, and scientific discoveries. The caliber of staff, curators, and even volunteers is unsurpassed because Packard's passion for marine life inspires and attracts top quality talent.

Packard has been recognized by many organizations for her conservation work. She has received the Audubon Medal for Conservation and the National Marine Sanctuary Foundation's Lifetime Achievement Award. She is also a fellow of the American Academy of Arts and Sciences. Additionally, she serves on the Joint Oceans Commission Initiative and is a highly respected speaker on ocean policy.

In 2019, Packard became only the second woman in marine sciences and conservation to be the subject of a commissioned portrait for the National Portrait Gallery in Washington, D.C. Her focus on oceans extends to the Monterey Bay Aquarium Research Institute (MBARI) and its deep-sea exploration programs.



Julie Packard examining seaweed and kelp in the Monterey Bay.

In February 2021, Packard spoke at the Garden Club of America's NAL conference focused on Climate Change Solutions. Following her virtual presentation, she engaged in an informative, interactive, and inspiring live discussion.

Packard comes from a family of dedicated conservationists. Her father, David Packard, received the GCA Cynthia Pratt Laughlin Medal in 1992. Thirty years later, Julie received the GCA Margaret Douglas Medal at the 2022 Annual Meeting. She has embraced and even surpassed her father's conservation commitment and has inspired millions of people to learn more about the oceans that cover more than 70 percent of the Earth. Conserving these vast oceans has been and is her lifelong journey. As the oceanographer David Gallo wrote in his support letter, "Julie's own words summarize her life's mission: 'I'm like front and center, all conservation all the time. I mean, that's what motivates me."



The Margaret Douglas Medal is awarded for notable service to the cause of conservation education.

Regular *ConWatch* readers may remember that the Seafood Watch program was highlighted in the December 2021 edition.

Can A Bumblebee Heal Itself?

By Seanne Reyes Clemente, GCA Centennial Pollinator Fellowship recipient

magine a person with a stubborn cold, desperately searching the aisles of their local pharmacy for a bottle of cough syrup. While this situation may seem uniquely human, many animals—from caterpillars to chimpanzees—also search their environments for medicine when they are sick or infected with parasites.

As an ecologist who studies the relationships between plants and pollinators, I focus my research on whether bumblebees can similarly self-medicate. Do bees search their botanical pharmacy for flowers with naturally occurring medicines? Research shows that many natural compounds can help control bee parasites. But such findings only suggest that bees are self-medicating. There is little evidence that wild bees actively change their behavior to visit medicinal plants when they are sick.

My work aims to address this gap in our scientific understanding. I study common eastern bumblebees and *Crithidia bombi*, a common bumblebee gut parasite. I have found that *Crithidia*-infected bees that feed on basil flowers display significantly fewer parasites in their guts. However, there are many varieties of basil, and the medicinal effect is seen only in some of them. Each basil variety produces a unique scent and flavor. The names speak for themselves— Cinnamon, Lime, and Anise varieties smell and taste exactly as you'd think.

With support from a Garden Club of America fellowship, I am studying the differences among basil varieties and measuring whether bees self-medicate. I plan to put infected bumblebees in enclosures that contain both medicinal and non-medicinal basil plants. I'll then use custom-built cameras to observe the choices they make. If the bees prefer medicinal basil to non-medicinal varieties, it's clear evidence that bumblebees do indeed self-medicate. If so, then a small amount of medicinal basil may have a large impact on the surrounding bumblebee community.

I'm also working to identify chemicals that are common to medicinal basil varieties. By identifying specific chemicals, I may be able to identify closely related plants—thyme, oregano, mint, etc.—which might also contribute to bumblebee health.

Upon completing my research, I hope to be able to recommend medicinal herbs to gardeners and farmers alike. This way, producers can have the double benefit of supporting their local pollinator community while also enjoying fresh herbs with their pasta!

Clemente is a PhD candidate in Organismic and Evolutionary Biology at the University of Massachusetts at Amherst. In 2021 Clemente received the GCA Board of Associates Centennial Pollinator Fellowship. For a list of GCA Scholarships Recipients, click **here**.



Seanne Clemente collects basil in her laboratory greenhouse. Photo courtesy of Seanne Clemente



A native bumblebee, Bombus impatiens, on flowering cinnamon basil. Photo courtesy of Wikimedia commons

Michele S. Byers— Conserving the Best of New Jersey for Present and Future Generations

By Cynnie Kellogg, The Short Hills Garden Club, Zone IV

A portion of the restored wetlands at New Jersey's Franklin Park Preserve. Photo, courtesy NJCF



New Jersey conservationist and Frances K. Hutchinson Medal winner, Michele S. Byers at Bamboo Brook. Photo courtesy of NJCF

The Garden Club of America awarded the Francis K. Hutchison Medal to Michele S. Byers, a true conservation hero! Byers just retired as Executive Director of the New Jersey Conservation Foundation, a nonprofit organization whose importance to conservation in New Jersey is impossible to overstate.

Throughout Byers's 40-year tenure at New Jersey Conservation, she worked tirelessly to preserve open spaces and to protect water resources. She forged conservation alliances and partnerships at the local, state, and federal levels. As former Governor Thomas Kean said, "It is hard to think of an environmental initiative where Michele has not been one of the leaders."

Byers began her career at New Jersey Conservation by preserving and restoring thousands of acres in the ecologically sensitive New Jersey Pine Barrens. Now a UNESCO Biosphere Reserve, the Pine Barrens cover almost 20 percent of New Jersey. It is the largest open space between Boston and Atlanta, protected by a regional commission that shapes land use planning and growth. Byers's finest accomplishment in the Pine Barrens was the acquisition of an abandoned cranberry farm on nearly 10,000 acres. To make it happen, she had to overcome a lack of funding, opposition from residents and businesses, and the owner's history of environmental violations. Byers's determination and commitment, as well as her ability to build relationships with partners from many different sectors, enabled her to protect the land by creating the Franklin Parker Preserve. The Preserve protects rare species and provides for both scientific research and extensive outdoor recreation. When conservationists planted 25,000 native Atlantic white cedar trees, the Preserve became the largest wetland restoration project in the Northeast.

New Jersey Conservation also helped to protect Palisade Cliffs, a National Landmark area along the Hudson River in Bergen County. In 2014, LG Electronics proposed a 143-foot office building which would have obstructed the Cliffs' historic vista. Byers, encouraged by New Jersey's GCA clubs, went to work. She enlisted the help of four former New Jersey governors—Brendan Byrne, Thomas Kean, James Florio, and Christine Todd Whitman—and formed a partnership with preservation groups, environmental advocates, and elected officials from both New York and New Jersey. Working together, the partners negotiated a compromise with LG on the building height and preserved the historic views for future generations.

Former Governor Whitman, in her support letter, touted Byers's early and critical involvement in the fourstate Highlands region. "This region, which begins in Connecticut and stretches through New York and New Jersey into Pennsylvania, is a critical drinking water supply area for millions of people and is chock full of natural, cultural, and historic resources worthy of protection," Whitman wrote.

Andrew Bowman, President and CEO of the Land Trust Alliance, praised Byers's work to support land preservation organizations across the nation. "Because of Michele's leadership, and her overall effectiveness in preserving thousands of acres in New Jersey, I have maintained Michele's membership on the Alliance's Land Trust Leadership Council," he wrote. "That exclusive group of 50 of the country's best land trust leaders provides strategic direction for the Alliance and the national land trust community. Among that illustrious group, Michele stands out and serves as a role model for other executive directors."

Though most land trusts preserve undeveloped areas, Byers has worked to conserve urban areas as well. Brad Campbell, President of Conservation Law Foundation, in his supporting letter wrote, "I would be remiss not to mention one additional area in which Michele has been a pioneer and has demonstrated exceptional leadership: the important role that conservation can play in the renewal of distressed urban communities. She has partnered with Don Baugh and Upstream Alliance in a wonderful clean up and restoration of the Cooper River Park area in Camden. It will give a wonderful opportunity for the residents of Camden to get out in nature and on the water. It will also have an educational connection to the schools."

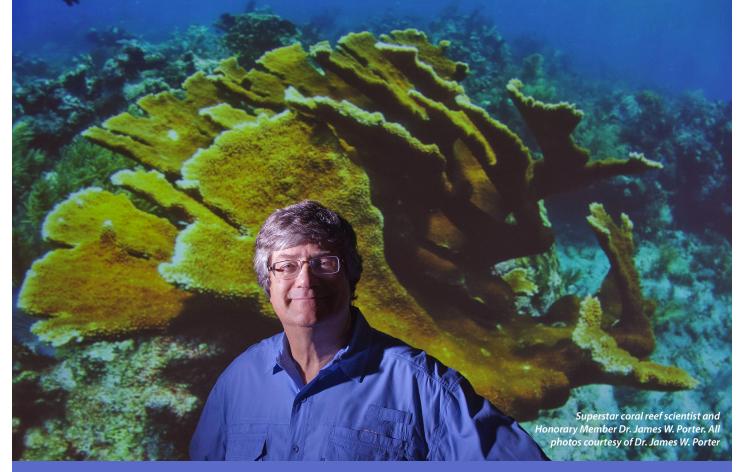
Byers's latest battle was with the PennEast Pipeline Co., which had proposed to build a natural gas pipeline from northeast Pennsylvania across the Delaware River to New Jersey. The 116-mile pipeline would have crossed through 4,300 acres of preserved open space and farmland, endangering more than 80 waterways, 44 wetlands, 30 parks, and 33 conservation easements. Pipelines of this type have historically leaked, emitting huge amounts of methane, which is a far more potent greenhouse gas than carbon dioxide. Byers addressed the PennEast threat by creating a new nonprofit, ReThinkEnergyNJ, of which she is president. The new organization has been singularly successful—PennEast withdrew its pipeline application in September 2021.

Michele Byers, a model of leadership for conservation groups across the country, has an inspiring record of success in conserving the best of New Jersey for present and future generations. She is indeed a well-deserved recipient of the prestigious Francis K. Hutchison Medal.



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





A Rock Star Scientist Working to Save the World's Coral Reefs

By Eleanor Rhangos, Trustees Garden Club, Zone VIII

Ithough coral reefs make up only one percent of the world's oceans, they are critically important to the ecological and economic vitality of the entire planet.

- Half a billion people rely on them as their sole source of protein and income
- They support more biodiversity than tropical rainforests
- They serve as home to roughly 25 percent of all marine life
- They mitigate coastal erosion by acting as a critical protective buffer to shorelines

Since the early 1970s, Dr. James Porter, a preeminent authority on the study and conservation of coral reefs and an Honorary Member of GCA, has dedicated his career to protecting and restoring this critical natural resource. His groundbreaking photographs of coral reefs in Discovery Bay, Jamaica—from 1976 to 1986—provide a sobering "before" and "after" view of the devastating effects of rising ocean temperatures and acidification. The Earth's corals are dying at an alarming rate. Dr. Porter's research has helped us understand the scope of the problem and its devastating impacts.

50% of the world's corals have perished in the last 30 years

During his long career, Dr. Porter has spearheaded major conservation programs in the fight to save coral reefs. His research was instrumental in Monroe County, Florida's decision to require advanced wastewater treatment throughout the Florida Keys. This conservation action lowered nutrient pollution around Key West and eliminated white pox disease that had devastated Elkhorn coral populations.

In addition, Dr. Porter documented carcinogenic substances leaking from unexploded bombs on coral reefs in Vieques, Puerto Rico. This ultimately led to a ban on bombing activities on the island. He also documented a link between these toxins and elevated cancer rates on



Off the shore of Hawaii, a WWII bomb nose is an unlikely host and poses a serious threat to a coral colony.

the island. As a result, CDC decided to withdraw a flawed report on the topic and fund medical studies to better understand this cancer cluster.

Not one to rest on his academic and environmental laurels, Dr. Porter continues to use his expertise to save corals around the world. As an active member of the International Dialogue on Underwater Munitions (IDUM), he is working with the U.S. Navy and the government of Hawaii to locate, disarm, and remove underwater bombs near several Hawaiian Islands, including Kahoolawe, which had been a naval bombing range. Unfortunately, this kind of military pollution is quite common among our lakes, rivers, and oceans. As they corrode, bombs release at least seven carcinogens, some in very high concentrations. These toxins are absorbed by corals, sickening not only the coral itself but also the flora and fauna living on the reef.

Porter and the IDUM team invented and patented a green remediation system that 'elementalizes' bomb toxins, rendering them harmless.

During his long research and teaching career, Dr. Porter has published numerous scientific papers as well as award-winning photographs in *Life* Magazine and the *New York Times*. He has testified before Congress four times. His work has been featured on ABC World News, NBC Nightly News, CNN News, and the CBS Evening News. He was the Chief Scientific Advisor and a principal cast member in the Emmy Award winning documentary *Chasing Coral*.

He has a rare ability to distill complex concepts and issues and convey them in a language that is accessible to the lay person. His dynamic style informs, engages, and inspires audiences to action. His knowledge and enthusiasm when speaking about the wonders of and threats to coral reefs are mesmerizing. No wonder that the Smithsonian Tropical Research Institute calls him—a former Smithsonian fellow—a "Superstar Scientist."

The climate crisis is a reality that can no longer be ignored. Dr. Porter recognized the devastating impacts of human activity on our planet decades ago and has devoted his life to understanding, educating, and advocating for its restoration. At the 2021 NAL Conference, Theodore Roosevelt V said, "Today, organizations like the Garden Club of America and others continue to make up the cathedral of environmental advocates protecting our natural world." Dr. Porter is one of the leaders in this cathedral and we are fortunate to have such a committed advocate working to stave off the catastrophic impacts of climate change.

Dr. James W. Porter is the Josiah Meigs Professor of Ecology Emeritus at the University of Georgia and the preeminent authority on the study and conservation of coral reefs. He was awarded Honorary Membership in the Garden Club of America in May 2022.



Dr. James W. Porter inspects the impact of a military depth charge on coral reefs.

Robert Glenn Ketchum-Using Pictures to Save the World

By Philipa (Flip) Caldwell, Woodside-Atherton Garden Club, Zone XII

n 1984, Robert Glenn Ketchum first learned how his powerful pictures could impact the environment while photographing the Hudson River Valley on a grant from the Lila Acheson Wallace foundation. He had two years to explore the valley and take photographs for a book. Early in the process, he showed an image of the blighted town of Beacon to the foundation's general counsel to ask if the town might be restored to its former beauty.

In an interview in 2020, Ketchum told the story:

"I took a picture from the Beacon rail yard one morning in a hard rain and it was a really blue-grey day, and the fog was down on the river, and the rail yard was just a mess. It was full of scrap metal and old tires...and I realized from studying the history of the Hudson Valley that this was formerly, in the 1800s, a famous ferry park which meant that people from Manhattan ferried up for the weekend... and stayed at bed and breakfasts in the town of Beacon... and now it looked like an abandoned mineral dump."

When asked why this image was so important, Ketchum explained the land's history and, within two weeks, the Wallace foundation had purchased the entire parcel to restore as a park.

In the 1980s, publishers weren't very interested in photos of ruined landscapes but, after his success with the Beacon rail yard, Ketchum realized the value of "comparison" shots. His publisher, Aperture, didn't want unsettling images of damaged landscapes in the Hudson River Valley book, but both Ketchum and the Wallace Fund



Right: J. Sherwood Chalmers Medalist, photographer Robert Glenn Ketchum. All photos courtesy of Robert Glenn Ketchum





Facing page: Katmai National Park; near Bristol Bay and the proposed site of the environmentally disastrous Pebble (Gold) Mine.

> Right: A view of Franz Josephland in the arctic has the feel of an abstract painting.

Below: Sundance, Utah, taken while Ketchum was "artist in residence" at the request of Robert Redford.







insisted. *The Hudson River and the Highlands* sold all 10,000 copies in three weeks and inspired the public to save this American treasure.

Ketchum used the same innovative strategy in *The Tongass: Alaska's Vanishing Rain Forest*. He showed images of virgin old growth forest juxtaposed with photographs of heavily logged areas that looked like "they had been hit by an atomic bomb." Aperture published the book in 1987 and sent a copy to every member of Congress; large prints were exhibited in the Senate Rotunda. The book was instrumental in convincing Congress to pass the Tongass Timber Reform Act of 1990, the largest timber reform bill in the history of the United States.

In 1989, the Sierra Club gave Ketchum the Ansel Adams Award for Conservation Photography "for effectively combining outstanding photography with conservation advocacy." The Audubon Society named him as one of the hundred people who shaped the environmental movement of the twentieth century.

With his growing reputation, the American Land Conservancy invited Ketchum to join its board. When he asked how he could help, they suggested that he photograph Limekiln Creek in Big Sur, an environmentally sensitive area that was threatened with logging. Ironically, Limekiln Creek was the very place where Ketchum first realized he wanted to become a landscape photographer and conservationist. Camping there during college, he



Above: With his unique artistic perspective on a chemical leach pond, Ketchum's work underscores the need for environmental protection.

Left: Hudson River Forest, 1983. Ketchum's book "Hudson River Valley" helped raise awareness about this threatened national treasure.

hiked up a creek to get into the silence of the redwoods. In a 2005 interview, he recalled the experience: "The fog was burning off and the big shafts of radiant light were coming down from the trees.... All I could hear were water sounds.... I put it all together in a way I never had before, and it changed everything forever and absolutely."

To perfect his photographic skills, Ketchum returned many times to Limekiln Creek, so he was ready to provide the Land Conservancy with the pictures they needed. As a result of his images, the Packard Foundation donated the funds needed to save over 700 acres of watershed in the place where Ketchum's journey began.

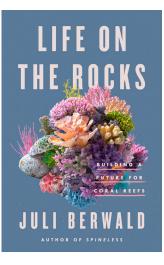
These anecdotes are just some of many examples of Ketchum's impact as a conservation hero. He has also worked to protect the San Ignacio Lagoon in Baja California and the Cuyahoga River Valley in Ohio. Meanwhile, the Bristol Bay "No Pebble Mine" project in Alaska is still ongoing. The writer and professor Joseph Campbell says the hero hears the call and must decide whether he will take up the challenge. Luckily for us, Robert Glenn Ketchum decided to accept.



The Garden Club of America awarded Ketchum 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.



BOOKSHELF: Seen, Heard, Read



Life on the Rocks: Building a Future for Coral Reefs

By Juli Berwald In a deeply personal narrative, Marine Biologist Juli Berwald chronicles the efforts of researchers racing against time to preserve the fragile and complex ecosystem of coral reefs. She recounts the compelling individual stories of heroic

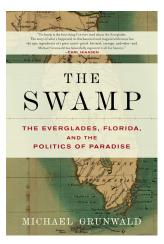
scientists facing seemingly insurmountable odds in their efforts to protect the reefs against the ravages of overheating oceans, pollution, and human-inflicted damage. Berwald juxtaposes the "inevitable grief of Climate Change" with hope, human courage, and the resilience of small things.

The Swamp: The Everglades, Florida and the Politics of Paradise

By Michael Grunwald

With an introduction by iconic Miami writer Carl Hiaasen, Washington Post reporter Michael Grunwald exposes the centuries old battle over the maligned and treasured Florida Everglades.

In yet another human attempt to subdue nature, the Army Corps of Engineers converted half of the subtropical habitat, imposing levees and canals to make way for



suburban development. The result was devastating to the "preserved" southern everglades, leading to the loss of 90% of native wading birds and threatening rare species like the Florida panther.

But recent efforts by conservationists have given new hope for the restoration of this national treasure,

even transforming the politics of Florida preservation. A visionary eight-billion-dollar rescue plan just may inspire similar efforts in wetlands worldwide and remove the Florida panther from the brink of extinction.



BBC Radio/Costing the Earth

Earthshot: Fresh Ideas for the Environment

In this three-part series, get inspired by the innovative ideas of young conservation heroes as they compete to address environmental challenges and become finalists in the Royal

Foundation's Earthshot Prize competition. You just may recognize of few of their stories...

---Carla Passarello, Dolley Madison Garden Club, Zone VII, Vice Chair, Assistant Editor, *ConWatch*, Conservation Committee



WHAT WE ARE WATCHING: Recovering America's Wildlife Act (RAWA)

The Garden Club of America, together with impressive partners, is a key player in assuring that a major piece of conservation legislation will promote the use of native plants and address the threat of invasive species. "If passed into law, the legislation will, for the first time in U.S. history, provide permanent, dedicated funding to state and tribal agencies to proactively conserve atrisk species," said GCA National Affairs and Legislation consultant Rich Innes. "And significantly, this includes native plants."

The Recovering America's Wildlife Act (RAWA) would provide critical funding to state fish and wildlife agencies and tribes to implement plans to conserve at-risk species. The bill includes strong incentives for states to include native plants and invasive species in their conservation plans.

Thanks to the diligence and persistence of the National Wildlife Federation, the Native Plant Society of the United States, the GCA, and others, RAWA may become law. If so, five percent of funds "shall be reserved for States and territories that include plants among their species of greatest conservation need and in the conservation planning and habitat prioritization efforts of their Wildlife Conservation Strategy."

RAWA advanced out of the Senate's Environment and Public Works committee on Thursday, April 7, 2022, by a 15-5 vote. It now goes to the full Senate for consideration. We hope it will lead to a vote on the Senate floor in the coming weeks. Much behind-the-scenes work has been going on by Chairman Carper, Ranking Member Capito, Senator Blunt, and Senator Heinrich to reach a compromise that protects the integrity of the bill without increasing the funding request to a non-negotiable level.

> -Carol Hunter, Albemarle Garden Club, Zone VII, Vice Chair Legislation, National Affairs and Legislation Committee

> > At the 2022 National Affairs and Legislation Conference (NAL) Collin O'Mara, President and CEO of the National Wildlife Federation discussed RAWA at length. Please click here to see the video.

The current version of the Senate bill S. 2372 includes language safeguarding native plants and combating invasive species. For more information go to https://www.congress.gov/117/bills/s2372/BILLS-117s2372rs.pdf.

Banner: The threatened Greater Sage Grouse. Photo courtesy of Wikimedia Commons



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