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*Supporters dine on the balconies of the Center building at an Ugly Bug Ball.*



Photo by Sean Meyers

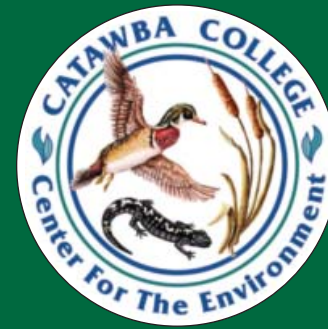
# The Center for the Environment at CATAWBA COLLEGE

## The First 25 Years 1996 - 2021





MODELING  
SUSTAINABILITY



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# Our 25-Year Journey Toward a Sustainable Future has Brought Positive Change



The Center for the Environment's 25th anniversary invites serious reflection on the many ways we have brought positive change to our community and our region – efforts that have laid the foundation for the next 25 years. We began in 1996 with a strong commitment to addressing the environmental challenges our region faced, a desire to serve as a role model for those who want to move toward sustainability, and a pledge to involve Catawba students and faculty in our endeavors.

That is why, from the onset, we have brought diverse people together – community members who realized the value of a beautiful greenway; developers who learned about the importance of green space and mixed-use development; parents who were concerned about the foods they served their families; grandparents who saw the horrifying effects of ground level ozone on their grandchildren's asthma; bankers who offered financial support to

the Clean Air Initiative because they knew it impacted our citizens' quality of life. Those connections have generated changes that have benefitted our region.

In this publication you will read about the causes that, together, we have championed; the ways we have worked together to educate the region; and the moments of transformation we have witnessed when we have offered opportunities for hands-on experiences or hosted conferences that educate and inspire.

As I review this magazine, I am in awe of the large number of people who have worked with us in different ways over these 25 years. Thanks to each and every one of you. I am truly grateful.

John Wear  
Founding Director  
Center for the Environment

John Wear and students capture aquatic invertebrates in Grant's Creek. (1995)



Photo by Susie Post Rust

# Modeling Sustainability



The Stanback Ecological Preserve captures water off the watershed, provides habitat, and preserves land.

## Center Models Living Sustainably

The Center for the Environment has from the beginning worked to set an example for living sustainably. It not only advocates for lessening our impact on the earth; it adheres to that commitment in everything it does, whether it is building a facility and conserving natural resources or preserving land and enhancing wildlife habitat.

Words and deeds are one at the Center. The staff understands that actions speak volumes, and students often absorb ideas and ideals by witnessing sustainability in action. The following pages highlight some of the ways the Center has modeled environmental stewardship during the past 25 years.



The Center building is known for its sustainable design, systems and materials.



# Catawba College Leads by Example

Catawba College has worked to set a good example in the realm of sustainability for decades. Early on, faculty often led the charge to bring environmental awareness to the fore.

These are just some of the ways the College has demonstrated its commitment to the environment:

- In the late 1980s and early 1990s, the College established its Catawba College Ecological Preserve, renamed the Fred Stanback, Jr. Ecological Preserve in the fall of 2012.
- In 1993, the Catawba's Environmental Science Program was initiated and soon became a signature program for the College.
- In 1996, the Center for the Environment was established with a mission to involve the College and its students in programs and activities that foster environmental stewardship not only on campus but in the region, the state and beyond.
- In 1998, Catawba College worked with the LandTrust for Central North Carolina, now Three Rivers Land Trust, to place 130 acres of its preserve under a permanent conservation easement, ensuring that the land would always be held in its natural state.
- In the '90s the College transitioned away from coal-fired steam heating to geothermal heating and cool-

ing systems in many buildings on campus.

- In 2001, the Center for the Environment building was completed. One of the first "green" buildings constructed in the state, the building houses both the Center for the Environment organization and the Environmental Program (now the Department of Environment and Sustainability).
- Catawba President Robert Knott signed the American College and University Presidents' Climate Commitment (ACUPCC) in 2007, setting goals to dramatically reduce emissions by the year 2030 in order to contribute to efforts that minimize global warming.
- In 2010, an organization called Sustainable Catawba was formed that involved the entire campus in environmentally sound actions.
- The Green Revolving Fund (GRF), established in 2012, financed on-campus investments in clean energy and resource reduction. A committee of faculty, staff, trustees and students began meeting monthly to look at ways to lower emissions by reducing energy use. The savings were then reinvested in additional campus efforts.
- A landmark solar installation in 2015-2016 underscored the college's commitment to renewable

Sustainable  
CATAWBA



Robertson College-Community Center

Eight new solar electric systems, installed primarily on roofs throughout the campus, provide nearly one megawatt of solar energy for the College. The Robertson College-Community Center's roof, shown here, provided a wide expanse for the solar panels.

energy. The eight new solar electric systems provided nearly one megawatt of solar electricity for the campus, producing more than all the other colleges and universities in North Carolina combined in 2016.

- In 2017, Catawba College established its Department of Environment and Sustainability.
- In 2018, Catawba installed energy-efficient lighting fixtures and converted fluorescent to LED lights across the entire campus. The College replaced over 4,000 fixtures with LEDs. This improvement allowed the College to both realize a significant reduction in utility costs and lower emissions.

All of these actions have set Catawba apart from other institutions as a college that is actively committed to lessening its ecological footprint. The financial support of Trustee Fred Stanback and many

others have made a significant difference in the College's ability to implement these sustainable projects.

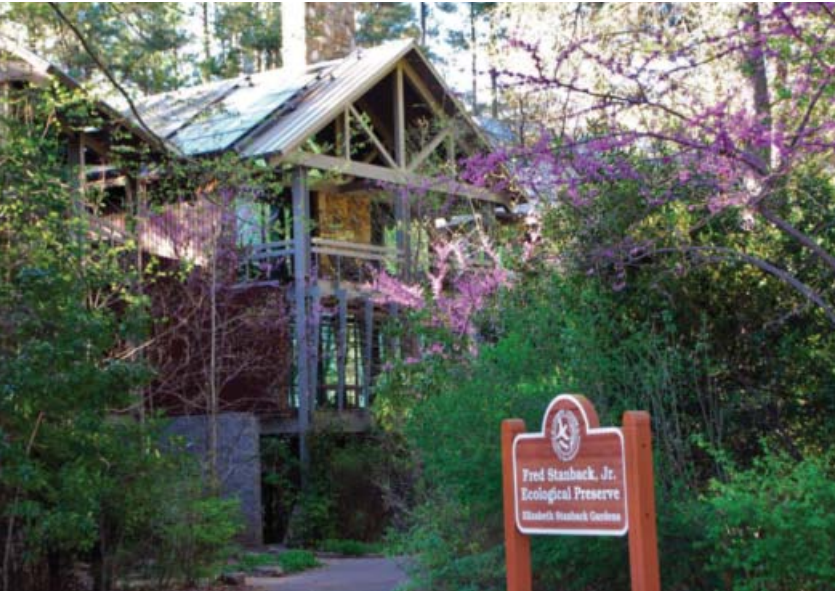
The Center for the Environment has played a role in many of these actions, lending its expertise when needed and taking the initiative when appropriate. It has supported the college; but, just as importantly, the College has supported the Center. It is Catawba College that first recognized a need for a dedicated program to educate the students and the region about the environment, and it is the College that has steadfastly supported the Center's efforts throughout its 25-year history.

For that reason, Catawba College deserves significant credit for the success of the Center for the Environment. Together, the College and the Center have distinguished themselves as environmental leaders. ■





# Fred Stanback Ecological Preserve Adds Value for Students, Community, Wildlife



The Fred Stanback Jr. Ecological Preserve is a rich educational resource as well as a protected habitat for wildlife.

The Fred Stanback, Jr. Ecological Preserve on the Catawba College campus has been and continues to be a rich educational resource for students, faculty and the community. It serves as a highly effective educational tool for both Catawba students and the hundreds of citizens who visit the preserve each year.

In the 1980s Fred Stanback, Bill Stanback, Dr. Dan Kirk and Dr. Michael Baranski began efforts to create an ecological preserve on the property adjacent to campus. A 2 ½ -acre lake, now called Lake Baranski, was created on the property along with a boardwalk on its south side, which allowed faculty and students to walk across the wetlands.



Dr. Luke Dollar (center) and Dr. John Wear (left) work with student volunteers on the Stanback Preserve.

In the fall of 1993, Dr. John Wear assumed the directorship of what was then called the Catawba College Ecological Preserve. Then in 1996, when the Center was officially established, it oversaw the preserve's management and maintenance in coordination with faculty in the Department of Biology and the Environmental Science Program (now the Department of Environment and Sustainability). The Center's preserve keeper and the director of operations have overseen the many work-study students that carry out the preserve's maintenance throughout its 25-year history.

## Natural Heritage Area

In 1998, the Center created an extensive system of trails as well as numerous ponds on the preserve. In addition, waterfowl impoundments were created with the assistance of the U.S. Fish and Wildlife Service and the Natural Resource Conservation Service. The combination of natural wetlands, a lake and managed impoundments provides habitat for a great diversity of birds, mammals, reptiles and amphibians. In fact, a sizeable portion of the preserve has been designated by the North Carolina Natural Heritage Program as a significant Natural Heritage Area.

That same year, the College placed 130 acres of its preserve under a permanent conservation easement with the LandTrust for Central North Carolina (now Three Rivers Land Trust). This ensures that the land will always be held in its natural state. As the first college in North Carolina and one of the first in the nation to place land under an easement, Catawba set a standard for how colleges should preserve their campus natural areas, especially those used in teaching.

In 2012, the name of preserve was changed to honor Fred Stanback, longtime benefactor and advocate of the Center.

Bill Stanback and Dr. Mike Baranski join Fred Stanback and Dr. John Wear at the new sign for the preserve.



## Bill Stanback Birding Loop

The Center for the Environment honored Bill Stanback in 2014 for his decades-long commitment to land and wildlife preservation and his special interest in birds. The Center established a birding trail on the college's Fred Stanback Jr. Ecological Preserve, naming it the Bill Stanback Birding Loop. The loop is slightly less than one mile in length and winds through deciduous forest and seasonal swamps and skirts around Lake Baranski as well as other impoundments and ponds.

In 2007 it was approved as a part of the North Carolina Birding Trail, a guide that links bird-watching sites across the state.



Bill Stanback (right) and son Mark Stanback pose behind the new sign.

## Outdoor Laboratory

The preserve's acreage serves as an outdoor classroom and laboratory for students and faculty, offering a host of experiential learning and research opportunities. Students have ample opportunities to analyze ecosystems and study the biodiversity that is evident on the property.

Since the preserve was established, faculty have both carried out their own research and have overseen an impressive array of student research projects. In the '80s, those faculty included Drs. Dan Kirk, Michael Baranski, Jay Buxton and Steve Coggin. Later, Drs. Jay Bolin, Sue Calcagni, Luke Dollar, Carmony Hartwig, Andrew Jacobson, Joe Poston and John Wear and Adjunct Professor Lisa Pope conducted research on the property.

Faculty in the Department of Biology and the Depart-

ment of Environment and Sustainability have also used the preserve to engage younger students, particularly through the National Environmental Summit for High School Students. They have shed light on aspects of the natural environment through their various areas of expertise.

## Diversity of Species

A total of 308 species of plants, including the gorgeous bigleaf snowbell (*Styrax grandifolius*) and the state's rare fringed heartwort (*Ricciocarpos natans*) can be found in the preserve and adjacent natural areas.

The Catawba College Department of Biology recorded 174 species of birds through a biological inventory of the preserve. The inventory includes geese, ducks, herons, egrets, hawks, falcons, hummingbirds, woodpeckers, swallows and warblers. Students note that the greatest diversity occurs in the spring, when observers can see both the winter birds and those that are passing through.

Forty-one mammal species have been sighted in the preserve, including beaver, river otter, white-tailed deer, red fox, coyotes and, most recently, the tracks of a young, transient black bear.

In addition, 21 species of reptiles, six of which are turtles, and 17 species of amphibians live in the preserve habitat. These include the common snapping turtle, which has been known to reach a weight of 86 pounds, and the Gulf Coast spiny softshell turtle. The amphibians include the mole salamander and eastern newt.



The Stanback Ecological Preserve acts as an outdoor laboratory for classes and the community.

(For more on Fred Stanback Ecological Preserve, go to page 8.)



## Fred Stanback Ecological Preserve

(Continued from page 7.)

Finally, nearly 70 species of butterfly have been recorded, including an impressive 87 percent of the total number of species found in Rowan County. This includes a variety of skippers, swallowtails, whites and sulfurs, gossamer-wing, and brush-footed butterflies.

## Environmental Benefits

Students can witness the environmental benefits of the ecological preserve firsthand. Water coming off the watershed from the college is trapped and held in the impoundments. This gives the water a chance to purify naturally, removing many of the pollutants found in storm water runoff.

In addition, the preserve improves our air quality. Since more than 75 percent of the property (139 acres) is covered with trees, it purifies the air because the trees absorb chemicals that combine to form air pollution. In fact, a CityGreen analysis estimated that the preserve removes annually 248 pounds of carbon monoxide, 5,702 pounds of ozone, 1,240 pounds of nitrogen dioxide, 4,958 pounds of particulate matter and 1,364 pounds of sulfur dioxide, for a total dollar value of \$32,626. This is particularly important in Salisbury and the greater Charlotte region because this area has had some of the worst air pollution in the country.



Dr. John Wear with Dr. Jay Bolin, who has recently assumed oversight of the Stanback Ecological Preserve

## Teaching and Service Opportunities

The preserve offers students opportunities to teach visiting community members about nature and conservation management. Catawba students regularly teach elementary and high school students, as well as those from other colleges, about the flora and fauna on the preserve and its value to the community. Students also have the opportunity for service in the maintenance of wildlife habitat and 3.2 miles of walking trails.

The ecological preserve has from its beginning set an example for Catawba students and the region in the realm of conservation and sustainability. Students absorb these values through constant contact with the preserve and the faculty who teach them about these practices. Then they, in turn, teach others about the preserve and the example it sets for the support of wildlife and the wise preservation of natural space.

“The preserve is valuable on so many levels,” says Center Director John Wear. “It offers a host of experiential learning opportunities while providing wildlife habitat and environmental benefits for our community. It has been a privilege to steer the development, enhancement and maintenance of this environmental gem for the past 28 years.”

Dr. Jay Bolin, chair of the Biology Department, recently assumed responsibility for the oversight of the preserve’s management.

“Equally gratifying is the fact that the current faculty are engaged in the development of long-term strategies for the overall management of the preserve,” says Wear. “This involvement ensures that this important environmental resource will continue to serve both the students and the community.” ■



Catawba students Madison Kluge and Holly Kuhn tour the preserve with Livingstone College students.

## Elizabeth Stanback Wildlife Garden Reflects Native Ecology



Tara Millington takes children into the Elizabeth Stanback Wildlife Garden for a lesson on wildlife.



Catawba students helped plant the native species in the wildlife garden.

parking lots that allow rainwater to seep into the ground, reducing the volume of storm water runoff.

With its 160-plus native plant species, the garden provides a natural habitat for butterflies, insects, birds and other wildlife. It also provides a learning laboratory for Catawba students who help in its maintenance and teach others about its ecology. Its diverse array of plants serves as a teaching tool.

The birds and mammals in the garden also have educational value. Students have seen daily visits by a red-shouldered hawk, which, on occasion, has swooped down to pluck a frog out of one of the ponds. They have also observed a fawn and its mother quietly moving through the woods at the edge of the garden and a bobcat, which emerged from the preserve just long enough to look around and then vanish. ■

The Elizabeth Stanback Wildlife Garden, which surrounds the Center for the Environment facility, was established in 2001. Named for the benefactor who provided funds for the building, it serves as a gateway to the Fred Stanback Jr. Ecological Preserve, which begins at the garden’s edge.

“Our goal was to create a naturalistic garden made up of plants native to North Carolina, especially plants that can be utilized by or provide food for birds,” says John Wear. “It’s a great example of the benefits of creating landscapes that reflect the area’s native ecology.”

The garden contains a dry creek bed under the eaves of the roof for rainwater capture and storage in a 5,000-gallon cistern. This provides water for the garden’s drip irrigation system and refills the ponds and man-made streams that surround and appear to pass through the building. In addition, a pervious concrete driveway runs through the garden, demonstrating how we can create roadways and

## Center Guided Effort to Establish the Salisbury Greenway

The Salisbury Greenway’s origins go back to 1993, the year Dr. John Wear joined the Catawba faculty to oversee the development of a new environmental program.

“I was interested in what the greenway represented,” Wear says, “not just alternative transportation pathways for cyclists and pedestrians but also the ecological benefits that might be incorporated into its design, including riparian buffers along streams or wildlife corridors that could tie together and protect greenspaces within the community.”

In 1993, Wear began pulling

volunteers together to establish a grassroots greenway committee to shepherd the process. The group worked in conjunction with several city departments. Later, the Salisbury Greenway Committee became an official body of the City of Salisbury.

Wear spent considerable time building momentum behind this concept, often giving presentations to various community groups. He received a grant that allowed him to hire recent graduate Bret Estep, who coordinated many of the activities that Wear and the committee developed. The original plans emerged in 1994.

The greenway started at Memorial Park and made a horseshoe loop around three sides of the Catawba campus. Work on the greenway plan continues. So far, it is a 4.05-mile path that is part of the Carolina Thread Trail. ■



The earliest efforts included tree plantings, which helped get the community and students involved.



The Salisbury Greenway provides paths for bicyclists and pedestrians.





## Center Facility Serves as Model of Sustainability

From the first day the Center for the Environment facility opened in 2001, it became a model of sustainability for the state. Bill Holman, then secretary of the N.C. Department of Environment and Natural Resources, called it “the wave of the future in resource and energy efficiency.”

Located between the Robertson College-Community Center and Omwake-Dearborn Chapel on the Catawba campus, the 21,000-square-foot building houses the Center for the Environment and the Department of Environment and Sustainability.

Everything about the building is grounded in principles of sustainability. It is a three-dimensional incarnation of the Environmental Program’s curriculum – an excellent teaching tool as well as an environmentally sound project.

Here are just a few of the details that illustrate the sustainable choices that went into its construction:

- Its walls of glass take advantage of the sun’s heating powers.
- Water running through underground wells collect geothermal energy to heat and cool the building.
- The green-friendly design features everything from conference-room tabletops made of crushed sunflower seed hulls to floors made of bamboo, a plant that grows back quickly; from

chairs made of recycled soda bottles to insulation made of recycled newspapers.

Catawba students were involved from the beginning through a seminar that gave them an opportunity to research green materials and technology for the building. Architects Karen Alexander and Jeff Sowers incorporated the students’ research into the building’s design. In addition, students served as the waste managers during the construction. They exceeded the Center’s 70 percent goal by recycling 86 percent of the construction waste.

Catawba College made a substantial commitment to the environment with this facility, according to the Center’s founding director, Dr. John Wear. “It is a building that represents now and to future generations the college’s commitment to the conservation and sustainable use of the earth’s resources,” he says. ■

*Elizabeth Stanback provided funds for the construction of the building and for the wildlife garden that surrounds the facility. John Wear took her on a ride in the adjacent ecological preserve on the Center’s gator.*



## Fred Stanback: A Personal Reflection

By John Wear

A retrospective on the Center for the Environment’s first 25 years would be sorely lacking without an acknowledgment of the massive impact Fred Stanback, Jr., has had not only on the Center but also on Catawba College and the Environmental Program.

Fred has for many years supported campus efforts to educate our students to be better stewards of our environment. His support has allowed the College to develop a robust academic program that is now called the Department of Environment and Sustainability.

Since the early 1990s, Fred has always been present at the Center’s conferences, lectures and events of all kinds. He has quietly supported our efforts, encouraging us to keep the science in front of the public and demonstrate the importance of stewarding the earth in as many ways as we can.

Fred has a keen understanding of current environmental issues. An enormous amount of information crosses his desk every day, and he understands it well. He is intensely engaged not just with our initiatives but with conservation efforts throughout the nation.

People often don’t realize the magnitude of his impact. He has supported efforts that advance the health of our citizens as well as the health of their children and grandchildren, the health of wildlife and the health of ecosystems. Everybody has benefitted.



*Each year, the N.C. Watershed Conference culminated in a canoe trip down a section of one of North Carolina’s rivers, building camaraderie and long-term friendships between like-minded people. Fred Stanback (center) engaged in the canoe trips as well as the myriad conferences and lectures. John Wear (second from left) led the trips.*

Most of all, Fred has been a strong advocate for educating young people. He has supported multiple efforts at the Center that encourage students to protect and conserve our natural resources.

He has been my friend and my mentor. He is an extraordinary man, and we are very fortunate that he has been a supporter all these years. ■

*Fred Stanback, Dr. John Wear, Dr. Paul Ehrlich, Dr. Mark Stanback, and Dr. Pete Myers enjoy a meal before Ehrlich’s and Myers’ presentations.*





## Coleman: 'Fred Stanback Influenced Me'



**Connor P. Coleman**  
Class of '06

Founder | Principal  
Resiliency Lands, LLC  
Carbondale, CO

The building that houses the Center for the Environment was under construction when I visited Catawba as a senior in high school. That building was integral in my decision to come to the College.

I was in the first class to spend all four years in the building, and I met the whole Stanback family at the dedication. I can't give Fred Stanback enough thanks for his support both at Catawba and Duke University when I was awarded a Stanback Internship in the graduate program at the Nicholas School of the Environment. I hold him in the highest regard.

I will never forget a conversation I had with Mr. Stanback one evening following a lecture at the Center. He advised

me on the value of removing unnecessary barriers and perceptions when advocating for environmental issues, including how to dress and present myself professionally. As a college student preparing to embark on a career in a field known as "tree-huggers," this advice proved to be invaluable, and I have carried it with me ever since.

The speakers the Center brought to the College allowed us to meet a lot of smart, passionate, dedicated people. That group of amazing minds was paramount to my education.

We also had a lot of opportunities to learn by doing. A group of my peers and I went to Dr. Wear to ask about starting a Campus Greening Initiative that would involve the whole campus in things like recycling and saving water and using alternative energy. That initiative laid the groundwork for sustainability efforts that are currently in place throughout the campus.

Our involvement in Environmental Science Day, when younger students were brought to the Center, was one of the best days of the year. We got to share our knowledge and passion for the environment with these bright

*(For more on Coleman, go to page 27.)*

## A Unique and Special Place



**Larry Shirley**

Chairman, Interstate  
Renewable Energy  
Council

Former Director,  
NC Energy Office &  
NC Clean Energy  
Technology Center

The Center for the Environment at Catawba College packs a powerful punch for a small liberal arts college in the South. Its 25-year history is chock-full of amazing accomplishments that would make the environmental centers at much larger state and private universities pale in comparison.

Beginning with a building that was the state of the art for sustainable construction, a superlative achievement in its own right, the Center has followed with a series of winning programs: a lecture series featuring national experts such as Erin

Brockovich and Amory Lovins, a regional clean air education campaign, the addition of an adjoining natural preserve that is a wonderful teaching laboratory, a summer camp for high school youth, a top-notch internship program and many other campus and community initiatives.

The Center's success over this period has been fueled by Director John Wear, whose vision, passion and commitment for the Center, the students, and the staff has helped to establish it as one of the leading private college environmental centers in the region. Many of his students have gone on to get advanced degrees from other renowned institutions. Still more have found careers and leadership roles with environmental businesses, nonprofit organizations, and local and state governments. Without a doubt, that is the crowning achievement of the Center's remarkable history.

Of course, you cannot reach such levels of distinction without the backing of the College's leadership, its trustees, and financial sponsors. The Stanback family has been unwavering in their support every step of the way in the Center's life, and the college's presidents and leadership teams have consistently supported its dreams and aspirations. When you have such support, coupled with John's direction and groups of capable students who are excited about the Center and its programs, then you have the recipe for success.

Happy Birthday, Center for the Environment! Wishing you many more! ■

# Educating the Region



Photo by Wayne Hinshaw

*The Center has brought speakers to the College who drew hundreds of people to campus to learn about environmental issues.*



*John Wear (second from left) spoke to a delegation from the International Visitor Leadership Program that traveled to the Center. The program is under the auspices of the U.S. State Department and International House. Delegates were from Finland, Pakistan, Zanzibar, Uruguay and Eritrea.*

## Center for the Environment has Regional, Global Impact

The Center for the Environment at Catawba College was founded in 1996 to educate the public and the college community about regional environmental challenges and to foster community-based, sustainable solutions to those challenges. From the outset, it has modeled how to live and work sustainably.

The Center has addressed current environmental issues from the very beginning. Those earliest endeavors – protecting North Carolina rivers, establishing a greenway, focusing on greater environmental sustainability in the region – set the stage for the Center's work throughout its 25-year history.



## Center for the Environment Tackles a Range of Issues

The Center for the Environment has tackled a wide variety of issues over the years: When it learned that the region had some of the worst photochemical smog in the country, it educated people of all ages about the causes and effects of ground-level ozone and ways to solve the problem. When credits for solar installations were expiring, the Center partnered with a national non-profit called SmartPower to promote solar installations in Salisbury and Rowan County. When public and private schools in the state wanted to demonstrate their commitment to sustainability, the Center assumed the leadership for the NC Green Schools Program.

The bottom line is that the Center has consistently identified environmental needs and filled them, whether by assisting or facilitating or educating. This involvement gave the Center the opportunity to engage Catawba students in the immediate issues of the time, and that experiential learning added value to their education.

It has helped people see trends, make connections and look beyond the issues to discover root causes. It has also served as a catalyst for sustainable solutions. Its impact has transcended the community and the region; models of sustainability and international conferences have extended its influence into the nation and the world.

The following section outlines some of the ways the Center has helped citizens, schools, churches and governments move toward a sustainable future. ■



Participants exchange ideas at the Center's "Clean Air: Community Strategies for Action" conference.



Hilburn Academy students study bees at their STEM model school. The Center recognized the academy through its NC Green Schools program.

## Conference Spawns N.C. Watershed Coalition

In the early 1990s, North Carolina faced a number of water pollution issues, but only a few of the state's 17 river basins had established their own organizations to protect them.

One of the biggest issues at the time was caused by the microscopic dinoflagellate *Pfiesteria piscicida* found in the rivers and estuaries of North Carolina stretching up to the Chesapeake Bay. The organism thrives on the discharge of nutrients in waterways. (A significant source of this discharge was confined animal feeding operations.) The *Pfiesteria* outbreaks not only caused massive fish kills; they also

caused neurological problems in people who worked in the state's fishing and crabbing industries.

This issue and others prompted the Center for the Environment to host the first of seven annual statewide watershed conferences in 1997 to address those challenges. That conference was the second largest annual statewide watershed conferences taking place in the nation, according to the national non-profit organization American Rivers. The first meeting led to the creation of the N.C. Watershed Coalition in 1998 with a mission to protect and improve the watersheds and water quality of N.C. rivers. ■



The first conference precipitated the creation of the N.C. Watershed Coalition.



The initial conference was the second largest annual statewide watershed conference taking place in the nation, according to the national non-profit organization American Rivers.



Catawba students shared their watershed-related initiatives and research at the conference. They presented a talk on their storm drain stenciling efforts.

## Center Responds to Regional Air Pollution

The American Lung Association released a report in 2003 that listed this region as having significant air pollution issues. That report prompted Rowan County Commissioners to enlist the Center's help in educating the community about Rowan's air quality problem and triggered the Center's creation of the Clean Air Initiative for Rowan and the Central Piedmont.

The project's purpose was to educate citizens about air pollution and foster programs to mitigate that pollution. The effort focused on educating the public through conferences, lectures, written material and speeches to community groups. The Center focused on the importance of smart growth, alternative transportation and fuels, the preservation of forestland and establishment of urban forestry programs, and ways to decrease dependency on the automobile and reduce emissions.



In March 2006 the Center brought hundreds of people to the Catawba campus for its first "Clean Air: Community Strategies for Action" conference.

Through the Clean Air Initiative, the Center also educated the public about the benefits of farmland preservation, sustainable development, energy conservation in municipal and college organizations and the retrofitting of school buses with catalytic converters.

Those efforts led to the Center receiving a \$1.2 million grant from the Department of Transportation in 2008, which allowed the Center to expand the initiative into its Campaign for Clean Air. This greatly increased its opportunities to catalyze action that benefitted the long-term health of the citizens in the region.

A primary strategy involved establishing cooperative relationships with various entities – schools, businesses, sustainability leadership groups, governments and hospitals – to magnify the Center's outreach efforts. ■



Center staff and interns created a toolkit that provided information on every aspect of creating a no-idling program at their schools. The toolkit, available on the Center's website, was ultimately adopted by North Carolina's Air Awareness program. Here, a student from China Grove Middle School records the number of minutes parents idle their cars.

## Community Initiative Causes Rowan County Solar Installations to Soar

The Center played a seminal role in an innovative program to help individuals and businesses save on electricity costs in Salisbury and Rowan County.

Solarize Salisbury-Rowan was a community initiative designed to inform residents of the advantages of solar power and to reduce costs through competitive bids by pre-approved installers. It was a partnership between the Center and SmartPower, a national non-profit organization that focuses on clean energy.

Rowan County officials granted only one solar voltaic permit from 2010-2013. After the Solarize

John Wear speaks to the audience about Solarize Salisbury Rowan before Lane Wallace takes the podium.



Catawba students Forest Fugate and Joel Schlaudt provide solar estimate for Ed Norvell.

Salisbury-Rowan initiative began, solar voltaic permits soared. A total of 119 were granted from 2014 to 2016. "This is an amazing increase," says Center Director John Wear. "When our citizens learned about the benefits of installing photovoltaic panels to capture the sun's rays, scores of individuals responded. Now solar energy has a real presence in Salisbury and Rowan County." ■



## Faith & Environment Conference Spurs Churches to Action

The Center organized an interfaith conference on Faith, Spirituality and Environmental Stewardship in 2008 that drew more than 300 people from North Carolina and Virginia to the Catawba campus.

The 2 ½-day conference, which featured 45 presenters, was a combination of inspiration and practicality – in the words of one writer, “the soaring spiritual ‘why’ and the down-to-earth ‘how’ of caring for creation.”

“No one faith tradition can do this alone,” said the Rev. Canon Sally Bingham, founder and president of Interfaith Power & Light. “We are stewards of creation: On this we all agree.”

The conference, largely funded by the Foundation for the Carolinas, helped to take the environmental message further into the mainstream, according to Center

Director John Wear. It was gratifying, he said, “for those who have held deep convictions about the environment for so long to see a host of new people who are coming to share the depth of our feelings about environmental stewardship.”

The results of the conference exceeded the Center’s expectations. It spawned a number of new environmental initiatives and practices. Multiple churches reported the formation of Greening Committees and Environmental Stewardship Teams. Many implemented energy audits and began offering environmental stewardship classes. Individuals also reported that they had made changes in their personal lives as a result of the conference. One person wrote that she was “transformed.”

During the years after the conference, the Center held Faith, Spirituality and Environmental Stewardship Workshops on numerous occasions. The events offered people who had implemented air quality improvements and other green projects in their faith communities the opportunity to share their experiences with those who wanted to learn more. ■

*Environmental thought leaders shared their insights at the conference: from left, Moderator Frank Levering, author/producer; Rabbi Fred Scherlinder Dobb of the Coalition on the Environment & Jewish Life; Dr. Matthew Sleeth, author of Serve God, Save the Planet; the Rev. Canon Sally Bingham, founder and president of Interfaith Power & Light; and Gary Gardner, senior researcher at Worldwatch Institute.*



## Center Conference has Global Impact

The Third International Hydrail Conference held at the Center facility in 2007 had a global impact. Stan Thompson, who spearheaded the meeting, reported that several positive outcomes ensued from the 2007 conference and those that were held in the following years.

By 2016, four German states had deployed 40 hydrail commuter trains, using off-peak wind and solar energy to make the hydrogen that propels the trains, and two companies in China had begun manufacturing hydrail trams.

“The lesson from this is that a small-town chamber of commerce (Mooresville’s Chamber was also involved in the conference.) and a modest-sized private college (Catawba) can make a dramatic difference in the world’s environment by doing what institutions

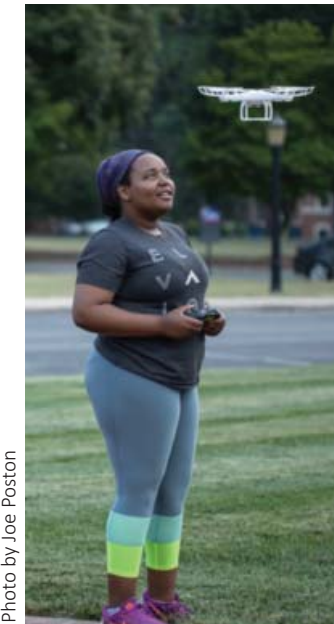
of higher learning were created to do: bring new knowledge into the world,” Thompson said. ■



*Hydrail tram in France*

## Center Initiates National Environmental Summit for Teens

Students from across the country converged on the Catawba College campus in July of 2011 to participate in the first of nine National Environmental Summits for High School Students. This week-long experience created an opportunity for high school students to work on innovative solutions to environmental challenges.



*Photo by Joe Poston*

*Participants use drones in Dr. Andrew Jacobson’s session called “Can Technology Save Biodiversity?”*

“The unusual thing about this summit is that it is not just for students who want to go into the environmental field,” says Center Director John Wear. “This is for students who love subjects like theater and music, history and economics, writing and philosophy as well as those who are at home with the sciences. The idea is to help them use their talents and interests to make a difference in the world.”

Engineers, scientists and other staff from the prestigious Rocky Mountain Institute in Colorado and other environmental thought leaders join Catawba professors and Center staff each year to tap the students’ imaginations while grounding them in sound practices.

### Solution-based approach

Summit leaders employed a solutions-based approach to environmental challenges. They stressed the importance of collaboration, whole systems thinking and effective communication skills.



*Photo by Seth Holtzman*

*RMI’s Martha Pickett engages students in an exercise on whole systems thinking.*

“We know – and the students know by the time they leave the summit – that having a great idea isn’t enough,” Wear says. “You’ve got to be able to bring others on board to get the concept from the drawing board to the real world.”



*In her focus group, Adjunct Professor Lisa Pope used a solutions-based approach to develop conservation strategies for butterfly populations.*

Segments of the summit help students learn how to collaborate and look for root causes. The students also learn to plan, communicate and mobilize an initiative so they can return to their schools armed with the skills they need to implement a plan.

The annual summit was interrupted in 2020 and 2021 by the Covid 19 pandemic. However, the Center offered one-day workshops in 2021 called Summer Explorations, which introduced participants to a variety of environmental subjects taught by Catawba professors. Topics ranged from the health of vernal pools and climate justice to wilderness survival and the use of drones to study biodiversity.

Dr. Mercedes Quesada-Embid, associate professor of Environmental Policy and Advocacy, wanted to generate a shared sense of empowerment in her Advocacy Workshop on Climate Justice. “I wanted to remind the students that intentionality in leadership, a steady pulse of understanding on community needs and ecologies, and creative communicative approaches are part of a healthy way forward for a just transition to a more sustainable world,” she says.

Creating a “climate of possibility” through the summit sets the stage for active learning. “The enthusiasm is palpable,” Wear says. “Innovative ideas shoot around the room with laser speed and intensity. It gives you a really good feeling about the future of the world.” ■



## NC Green Schools Program Promotes Environmental Stewardship

The Center for the Environment assumed leadership for the NC Green Schools Program in 2015.

The program promotes sustainability in the state's public and private schools from pre-kindergarten through 12th grade and offers teachers resources and tools to help them start green initiatives.

Recognizing schools that take steps to initiate and maintain sustainable practices and implement a ro-

*Providence Day School students display their NC Green Schools award.*



*Center presents awards to schools for their sustainability and stewardship efforts through its NC Green Schools Program.*



*Students from Salisbury Academy display their transplanted kohlrabi and broccoli.*

bust environmental education curriculum has proved to be a strong motivator. A total of 25 schools have now received the NC Green School designation at three different levels: Promise, Quality, and Excellence.

"Each school is unique in the way it integrates sustainability education and green practices," says NC Green Schools Program Coordinator Katie Cavert Ferrell. "But what weaves these schools together is the way they nurture a love and respect of the environment in their students." ■

## Center Features Nationally Renowned Environmental Leaders



*More than 600 people attended a presentation by Lester Brown, founder of the Worldwatch and Earth Policy Institutes. (above)*

The Center has brought a number of nationally renowned environmental leaders to the College. Hundreds of people have attended these events, and the students have had multiple opportunities to meet with the speakers in person. ■



*Amory Lovins, chief scientist, co-founder and chairman emeritus of Rocky Mountain Institute, interacts with students. (above)*



*David Orr shared his thoughts with students while he was on campus. (left)*

*Robin Emmons of "Sow Much Good" advocates for social equity. She talks with Mimi Wihad. (right)*

Photo by Wayne Hinshaw

*John Wear introduces consumer advocate Erin Brockovich, who spoke on "Community Power: How We Can All Make a Difference in Creating a Healthier Planet." (above)*



Photo by Eli Wittum

## Center Lauded for Work on Campus and in Region

The Center for the Environment has received a number of awards over its 25-year history. Center Director Dr. John Wear received state and regional recognition early on. Noting the efforts of staff, partners and volunteers, he accepted these awards: the 2001 Green Builder of the Year award by the Carolina Recycling Association; recognition in 2002 as a "Guardian of the Earth" by the Charlotte Observer; the 2003 N.C. Conservationist of the Year award by the National Wildlife Federation; the 2005 Airkeeper Award from the Carolinas Clean Air Coalition; and the 2015 Catawba College Trustee Award for leading environmental efforts on campus and in the greater community, educating students throughout campus about the importance of caring for the environment, helping to lessen the college's ecological footprint and underscoring Catawba College's commitment to sustainability in the state and the region.

The Center has also received recognition: an award for its contribution and dedication to improving the state's air quality from the N.C. Air Awareness Program in Charlotte and Mecklenburg County in 2004; and one of four N.C. Mobile Clean Air Renewable Energy Awards from the N.C. Solar Center in 2014.

Finally, in our own community, Catawba College received the 2016 Susan W. Klutz Sustainable Salisbury Award for its commitment as a role model for the stewardship of natural resources. Mayor Pro Tem Maggie Blackwell cited Center for the Environment initiatives as well as other campus efforts as notable examples of the college's stewardship. "Catawba College is a pacesetter in sustainability," she said. ■



*The Center for Environment staff received an N.C. Air Awareness Award in 2004. Staff members posed with Jerry Stahl, coordinator for the Charlotte Area N.C. Air Awareness program (third from left): Kim Smith, Kurt Cribb, John Wear, Brandi Orbin and student intern Sarah Simmons.*





## Center Provides Benefits to the Larger Society

Catawba's Center for the Environment has advanced the cause of planetary stewardship from the initial design of its building and use of such renewable resources as bamboo and recycled plastics in its furnishings to today's impressive schedule of noted speakers.



**Dr. Bethany Sinnott**  
Professor Emerita  
of English  
Catawba College

The Center made possible the development of an academic program that has educated over two decades of Catawba students. Some have gone on to graduate school in such prestigious institutions as Duke's Nicholas School of the Environment, while others have developed a conservation ethic that informs their everyday lives.

The educational outreach of the Center has extended to high school students who have benefited from summer programs introducing them to various aspects of envi-

ronmental concerns. One can only surmise how far the benefits of such education have reached, not only in their lives but in the health of the planet.

The Center has provided benefits to the larger society by sponsoring appearances from renowned experts in various fields related to environmental concerns. These programs, held at the Center, are free and open to the public. They often attract audience members from beyond Rowan County. One good example is the presentation in October 2016 by guest speakers Dr. Paul Ehrlich, Bing Professor of Population Studies Emeritus at Stanford University, and Dr. Pete Myers, founder and CEO of Environmental Health Science. Their program's title, "The Current Mass Extinction Event: Causes and Cures," indicates an intention not only to educate but to encourage listeners to become involved in combating threats to the environment. Many of the Center's programs share such intentions.

As a frequent audience member from an entirely different academic field, I can testify to the relevance of these programs to all members of a society that faces grave threats to the environment on which we all depend. I am grateful to have participated in many events in the Center's first 25 years and look forward to its future achievements. ■

## Important Work Lies Ahead

Modes of education have changed at the Center for the Environment since the onset of the coronavirus, but the work of educating the community, both on campus and in the region, continues.

We still face environmental issues that require thoughtful solutions, and Generation Z (those born after 1997) insist that we tackle these issues together, across generations. Many of them acknowledge that they suffer from eco-anxiety, defined as "the chronic fear of environmental doom."

A panel led by Heather White, CEO of Heather White Strategies, explored the effects of environmental stress on Generation Z in February 2021. The discussion was moderated by Dr. John Wear and broadcast on Zoom.

White pointed to an eco-trifecta that exacerbates students' feelings of anxiety: the overwhelming impact of social media, loneliness and environmental stress.

The group had this advice for young people suffering from eco-anxiety.

- Limit social media; take breaks and deal with what is in your realm of control.

- Put down your screens and connect with others.
- Go outside as a family and enjoy nature.
- Do "one green thing" every day.
- Balance the bad news with good news.
- Initiate conversations with the people around you. Listening to other points of view helps in the formulation of solutions.
- Acknowledge that, while things can seem gloomy, there's much good in the world. ■



Online discussion panelists (top, from left) Moderator John Wear, panel leader Heather White, Salem Academy senior Margaret Dees. (bottom, from left) Catawba junior Nana MacKinnon, Catawba senior Taylor Marshall and Catawba counselor Lauren Stephenson.

# Engaging Students & Faculty



Environmental Stewards enjoy down time on their fall retreat.

## Center Involves Both Students and Faculty in Its Initiatives

One of the hallmarks of the Center for the Environment is its steadfast commitment to involving students and faculty in projects that help educate others, both on and off campus. The National Environmental Summit, the NC Green Schools Program, the Service Scholarship Program and many other initiatives have served as mechanisms for engaging Catawba students and faculty in the Center's work.



Photo by Joe Poston

Dr. Andrew Jacobson instructs National Environmental Summit students in the use of drones in his workshop called "Can Technology Save Biodiversity?"



# National Environmental Summit Taps Expertise of Faculty, Students

The National Environmental Summit for High School Students, hosted by the Center and Rocky Mountain Institute, is one of the best examples of student and faculty involvement. It was held nine consecutive years before the pandemic necessitated a pause. Catawba students are engaged by helping in the planning and marketing before the event takes place and then with the logistics as the summit unfolds. They serve as counselors, lead team-building exercises and assist with focus groups.

“Our students gain real-world experience as they participate in this endeavor,” Center Director John Wear says. “They are an enormous help to us in both the planning and orchestration of this ambitious enterprise.”

Faculty from across campus are also involved in the summit. “We have been fortunate to have so many outstanding faculty members from many disciplines who have engaged with us on programs like the summit,” Wear says.

One of the strengths of the summit is that it offers perspectives from the arts as well as the sciences. The focus groups have ranged from Dr. Constance Lowery’s “Climate Change and Oceans” to Dr. Forrest Anderson’s “Field Guide to the



Catawba students lead team-building exercises during the summits.

Politics and Poetics of Environmental Writing”; from Dr. Jay Bolin’s “Invasive Alien Plants and Animals” to Professor Ashley Pierce’s “Explorations in Environmental Art.” Both students and faculty play a pivotal role in this week-long event. ■



Dr. Carmony Hartwig’s group conducts fieldwork collecting adult and larval mosquitoes.



Dr. Jay Bolin’s group studied invasive species like kudzu.

Dr. Joe Poston shows summit students how to band birds.



Professor Ashley Pierce (left) engages students Salem Fleming and Harper Lawing in environmental art.



# Faculty Engage in Environmental Education Efforts

Catawba College faculty serve on panels and as speakers at Center-related events. “They contribute to our efforts to educate the public in a number of ways,” says Center Director John Wear. ■



Dr. Maria Vandergriff-Avery, professor of Sociology, (left) and Dr. Sue Calcagni, associate professor of Biology and Environmental Science, offer their thoughts after the film screening of “The Devil We Know.” Ken Cook, co-founder and CEO of Environmental Working Group, also joins the discussion.



Dr. Mercedes Quesada-Embida, associate professor of Environmental Policy and Advocacy at Catawba (second from left) and Dr. Luke Dollar, head of the Department of Environment and Sustainability (far right), participate in a panel discussion following a screening of “Right to Harm,” a film that focuses on the public health impact of factory farming.



Dr. Luke Dollar, chair of the Department of Environment and Sustainability, talks with students in the Energize NC program.

# Catawba Students, Faculty Help with NC Green Schools Program

Students and faculty have worked with coordinator Katie Cavert Ferrell in the Center’s NC Green Schools Program, a non-profit organization that promotes sustainability in the state’s schools from pre-kindergarten through 12th grade. The program helps teachers connect and share ideas, offers resources and tools to help them start green initiatives and recognizes schools that meet specific goals. ■



Adjunct Professor Lisa Pope takes area teachers to the Stanback Preserve for instruction. The workshop is sponsored by the Center’s NC Green Schools Program. (above)



Catawba students helped Salisbury Academy with its playground design: (from left) Carolyn Kasper, Salisbury Academy Head of School Beverly Fowler, Elizabeth Howard and Holly Kuhn.



# Service Scholarship Program Promotes

Students have initiated a number of projects through the Environmental Stewards Program, a service scholarship program which promotes experiential learning and gives students opportunities to hone their leadership skills.

Many of the student-led projects have had long-lasting impacts. In the fall of 2013, Catawba senior Dan Couchenour created a project that tracked students' water usage, encouraging them to use less water and therefore save money. The money they saved on utility bills was used to purchase a dozen bicycles and one tandem, which students can borrow, much like they check out library books.

Student Joel Schlaudt assumed the leadership of the project when Couchenour graduated. "It changed into something bigger," he said. "It ultimately focused on helping students become aware of not only their water usage but their whole lifestyle."



Bicycles were purchased with money saved from water conservation efforts.

## Fostering a Love of Nature

Steward Eli Wittum was inspired to initiate a project that would foster a love of nature in youngsters when he witnessed a Lowe's Home Improvement summer program that allowed children to build their own birdhouses.

He and other Catawba students helped children build



Eli Wittum installs one of the birdhouses.

birdhouses over a two-month period at Friday Nights Out in Salisbury. Stewards modeled the structures after the classic Eastern Bluebird house, but the entrances were modified so a variety of birds could use the structures for their nests. A few were even constructed to house Southern Flying Squirrels and Eastern Screech Owls.

Wittum installed the birdhouses in the Stanback Ecological Preserve, mapping the location of each house so the youngsters could find the birdhouses they made when they hiked on the preserve's trails. Wittum reasoned that getting out in the preserve would help them appreciate the natural world.

The project was a cooperative venture with Shaver Wood Product in Cleveland, the Center for the Environment, Horizons Unlimited, Dan Nicholas Park, the LandTrust for Central North Carolina and Lowe's Home Improvement.

Environmental Stewards Colleen Smiley, Doug Taylor, Britt Parsons and William Spencer helped Wittum as did seniors Balyn Krout and Greg Alexander.

# Leadership, Experiential Learning

## Keeping Bees

A number of Environmental Stewards have become beekeepers on the Stanback Ecological Preserve. Steward Joel Schlaudt initiated the project during the 2014-2015 academic year after learning about the decline of bee pollinators. He wanted to bolster the local population and provide a space for education about bees.

The students have learned that each hive needs about 45 pounds of honey to survive the winter. The students have sold and donated the excess honey.

Stewards who have been involved in the project include Katherine Shumaker, Pam Casdorff, Forest Fugate, Payden Mitchell, Hannah Przelomski, Max Royal, Colleen Smiley, William Spencer, Doug Taylor, Alex Turner, Elizabeth Howard, Malachi Gray and Eli Wittum.



Environmental Stewards check the bees in one of the hives on the Stanback Preserve.

## Growing Vegetables

Raised beds teem with tomatoes and strawberries, broccoli and beets.

The sustainable gardens on the Catawba campus have given Environmental Stewards opportunities to learn about the complexities of growing vegetables and herbs in a sustainable manner.

Catawba students Sloan Kessler and Jonathan Buffkin started the project during the 2013-2014 academic year, and Environmental Stewards Forest Fugate and Joel Schlaudt assumed leadership when Kessler and Buffkin graduated.



Students plant vegetables in sustainable garden.

## Teaching about Conservation

The Fred Stanback, Jr. Ecological Preserve offers students opportunities to teach people from the community about nature and conservation management. Catawba students regularly teach elementary and high school students, as well as those from other colleges, about the flora and fauna on the preserve, its preservation and value to the community.

Over the last 25 years, the Center has worked closely with faculty in the preserve's management. Students are consistently involved in the maintenance of 3.2 miles of walking trails and wildlife habitat.

"The ecological preserve has from its beginning set an example for our students and the region in the realm of conservation and sustainability," says Center Director John Wear. "Students absorb these values through constant contact with the preserve and the faculty who teach them about these practices." ■



Environmental Steward Kerstin Brown offers children an opportunity to learn about what the earth has to offer.



# Alumni Reflect on Center's Impact

## A Passion for the Environment



**Sarah Moore**  
Class of '12  
Environmental  
Plan Formulator  
U.S. Army Corps of  
Engineers

When I visited Catawba College in the summer of 2008, I was immediately impressed by the green building that housed the Center for the Environment and how the Elizabeth Stanback Gardens were so clever in their design – showing off the topography and plants of my beloved North Carolina.

I started school that fall and I was one of the lucky few that got to be a work-study student with the Center. I formed many close bonds with not only the students I worked with but the Center staff as well.

During my six years at the Center (four as a work-study, two as an employee) I worked with Center staff, including Kurt, Matt, Amanda, Craig, Dolly, Lee Anne, Juanita, Cathy, and John, who were all hard workers and really believed in the mission of the Center. They taught me how to turn my passions into my career, how to work through the late nights and tight finances that come with the non-profit world, how to have fun and be productive at work (any Ugly Bug Ball fans out there?), and how to shoot for the stars and have big ideas (like small Catawba hosting a National Environmental Summit).

There is not enough room in this short article for me to write how impactful the people that make up the Center and the organization itself have been in my life. In that same vein, I am sure that over the last 25 years the Center for the Environment has had an incalculable impact on the world.

So with that, I want to say thank you to all of the students I worked with, the amazing Center staff (past and present), and everyone else that is involved at the Center for helping me realize that my actions matter and that I am capable of being an environmental steward in every aspect of my life. When people see my passion for the environment in my work and daily life, they are seeing a piece of the Center for the Environment. ■

## Speaker Set Me on Career Course



**Dan Robertson**  
Class of '09  
Director of Land  
Acquisition  
Empire  
Communities

The Center for the Environment had a pivotal influence on my career path. Catawba students were given opportunities to talk with speakers that the Center hosted, and one of those guided me into graduate study in urban design and later in real estate development and finance.

I thought I wanted to go into green architecture and real estate development, but I didn't know how to do it. I spoke with David Walters, the chair of the Urban Design Program at the University of North Carolina at Charlotte, after he gave his

presentation at the Center, and he helped me chart my course.

I found the Center beneficial in other ways: I learned the value of networking from John Wear. He is very good at cultivating relationships, which, I learned, is essential to getting things done. His modeling of that vital skill has helped me throughout my career.

The Center offers lots of opportunities for students to grow and learn by doing. That is one of its primary strengths. After graduation, I had the opportunity to run the Catawba College Energy Corps at the Center, which involved coordinating the partners and interns.

The Center also impacts the greater community through its educational programming. In addition, it has a far-reaching effect because the students who are involved with the Center through the Environmental Program have an impact in the communities after they graduate.

I know from personal experience that the Center adds value to the students' education, and it also helps people in the community understand the environmental issues we face. ■

## We Need More like the Center



**Elizabeth Howard**  
Class of '17  
Environmental  
Associate  
World Cocoa  
Foundation

The Center for the Environment has been a cornerstone in my professional and personal endeavors and was the reason that I attended Catawba College. It offered me an intimate college experience that I am forever grateful to have had. I am thankful for the mentorship that I received from faculty, the access to the immersive learning lab offered by the Center's unique physical presence in both a beautiful ecological preserve and building, and the lasting relationships I created there.

Now, as I have moved on as an adult and am looking to find a place to call home, I find myself

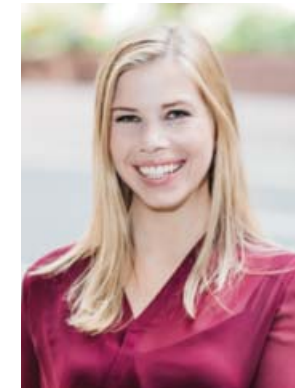
seeking opportunities to live in areas where I can engage with similar institutions. Places like the Center enrich the lives of so many because they are establishments for youth development and alternative learning.

Over the years, I have seen how the Center is a gathering place for building and supporting the community both inside the academic walls and in the community beyond. Not only that, but the Center is a space for cross-disciplinary learning and discovery and a bridge for interactions between diverse community members that, in turn, offer their knowledge and world views to young students.

Given how isolated and polarized the world has become, and with the increasing number of global challenges, organizations that build community and support collaboration are critical for creating a resilient future, and we desperately need more like the Center for the Environment. ■

## Center's Connections Brought Me to Where I Am Today

The Center for the Environment gave the students in the sciences a sense of community and a sense of belonging. It also provided valuable connections with professionals in the field. I met Ken Cook of Environmental Working Group after he spoke at the Center and, as a result, landed an internship with the organization.



**Kacey (Hoover)  
Weis**  
Class of '11  
Compliance  
Manager  
RWE in America

Students were given lots of opportunities to work on community programs the Center was involved in. My role working on the Campaign for Clean Air sits on my resume as my first ever "adult" job. One could say it truly is the foundation of my career.

Shelia Armstrong (Air Quality Outreach Coordinator) taught me how to build relationships and actively listen to those we were trying to educate. She was, and still is, a great mentor. I cherish the work we accomplished together, including receiving

the 2012 Mobile Clean Air Renewable Energy Award for our No Idling Program.

All those connections brought me to where I am today working in the field of renewable energy. I tell students that it's fine if you don't know what you want to be when you grow up. You just find what you're good at, and you take every opportunity to fuel the skills and intentions and the things you enjoy. Catawba and the Center were that fuel for me. ■

## 'Fred Stanback Influenced Me'

(Continued from page 12.)

students. Seeing their faces light up when we showed them interesting things about the animals on the preserve was quite a pleasure. It reminded us that teaching others is the best way to learn.

The bonds we established, the professionals we met and the opportunities we had at the Center impacted me enormously. I am beyond pleased with the life and career that I have forged for myself, and I have no doubt in my mind that the Center for the Environment at Catawba College afforded me the best possible foundation necessary to change the world. ■



# 25 Years of Outreach



Gina Rye accepts award from the Center on behalf of Food Lion at sustainability awards ceremony.



The Center partnered with the Boy Scouts on the development of the Energize NC Program for youth.

## Center Supports Sustainable Solutions

The entries listed in the next few pages suggest the multi-faceted approach the Center for the Environment has taken in addressing regional environmental challenges during its first 25 years. The Center's approach has been grounded in a commitment to lead by example and to bring diverse groups together in support of sustainable solutions, involving its students and the community.

# 25 Years of Outreach

## 1996

The Center for the Environment at Catawba College is established with a mission to educate students and the public about environmental stewardship and sustainability and to involve the faculty, staff, students and the Center's partners in programs and activities that promote sustainable solutions to persistent environmental problems.

The Center, under the leadership of its founding director, Dr. John Wear, works with the City of Salisbury to establish the Salisbury Greenway. The linear park provides not only a trail for bicyclists and pedestrians; it also preserves open space and provides a riparian buffer to reduce the sediment and filter the nutrients going into Grant's Creek.



John Wear gave presentations to numerous organizations to generate engagement in the greenway system.

## 1997

The Center hosts the first of seven annual statewide Watershed Conferences to address challenges like the *Pfiesteria* outbreak, flooding and pollution. The initiative ultimately leads to the creation of the N.C. Watershed Coalition.

## 1998

The Center helps to acquire additional

land for the Catawba Ecological Preserve, increasing its area to 189 acres. Working with the LandTrust for Central North Carolina, it facilitates the College's placing a significant portion of the preserve under permanent conservation easement. Catawba becomes the first college in North Carolina, and one of the first in the nation, to preserve campus property in perpetuity.

## 1999

Center staff and students, with the help of the U.S. Fish & Wildlife Service and the Natural Resource Conservation Service, create a structure on the Catawba Ecological Preserve to impound 23 acres of water from the surrounding watershed. In addition, numerous small and large ponds and an extensive network of trails were created. The new trail system allows Catawba students to carry out the weekly maintenance of the preserve. The project not only expands the waterfowl and shorebird habitat but also helps with water retention and the natural purification of runoff.



Students stem the flow of water with boards for the waterfowl impoundment.

Ground is broken for the sustainable facility that houses the Center for the Environment. Architect Karen Alexander notes that Catawba is leading by example: "It is showing how a small college can make a big statement about the importance of the sustainable use of the earth's resources." Bill Holman, then secretary

of the N.C. Department of Environment and Natural Resources, calls it "the wave of the future in resource and energy efficiency."

Catawba becomes one of the first colleges in the state to offer certification for environmental educators. The program, initiated by the N.C. Office of Environmental Education, is a requirement for environmental educators in nature centers, state parks, aquariums and natural history museums in North Carolina.

The Center begins offering nature programs developed and instructed by Catawba students.

## 2000

Catawba students are placed in charge of recycling construction waste on the model green structure to house the Center. The goal is to recycle 70 percent of the material, but they recycle 86 percent. The students find that, in many cases, it is cheaper for contractors to recycle the waste than to take it to the landfill.

The Center for the Environment is featured in a PBS documentary called "Environmental Partners: Designing a Sustainable Future." It is the first of two 30-minute TV documentaries focusing on the Center, its partnerships and its mission to teach others how to be careful stewards of the earth's resources.

## 2001

Classes are held for the first time in the Center for the Environment facility, which was designed to encourage the integration of its program with environmental efforts in the region. It used recycled and recyclable materials and an environmentally friendly geo-exchange system to heat and cool the building.

The Center launches EcoConnections,



an online magazine which features people and programs across the state and nation that promote sustainability and environmental stewardship.

- ☀ Dr. John Wear, landscape architect Kevin McCorkle and Jeff Sowers of KKA Architecture, develop a naturalistic, wildlife-focused landscaping plan for a wildlife garden that will surround the facility. Center staff and Catawba students, with assistance from horticulturalist George Morris, implement the plan. Nearly 260 native species surround the sustainably designed building, providing wildlife habitat and a rich laboratory for studying plant diversity and techniques for water conservation.

## 2002

- ☀ The Center facility becomes a popular location for conferences that focus on everything from environmental policy to sustainable design.

## 2004

- ☀ The Center launches the Clean Air Initiative to address air quality problems in Rowan County and the region. Banks, businesses and foundations offer financial support for the effort.

- ☀ The Center initiates the Clean Air Lecture Series, bringing experts to the campus to talk about issues related to air quality. Catawba students have the opportunity to talk with noted authorities on topics ranging from air pollution and health to the importance of land-use planning.

- ☀ Through the Clean Air Initiative the Center supports a multi-faceted approach to cleaning up the air, including efforts involving farmland preservation, sustainable development, energy conservation in municipal and college organizations and the retrofitting of school buses with catalytic converters.

- ☀ The Center receives an award for its contribution and dedication to improving the state's air quality from the N.C. Air Awareness Program in Char-

lotte and Mecklenburg County. Noting the efforts of staff, partners and volunteers, Center Executive Director John Wear receives state and regional recognition over the course of five years: 2005 Airkeeper Award from the Carolinas Clean Air Coalition; 2003 N.C. Conservationist of the Year by the National Wildlife Federation; 2002 "Guardian of the Earth" by the Charlotte Observer; 2001 Green Builder of the Year by the Carolina Recycling Association.



Dr. Clay Ballantine, a physician and American Lung Association board member, discusses air quality with student Sarah Christine (Simmons) White.

- ☀ The Center brings community leaders, municipal staff and American Forests officials together to explore the possibility of conducting a regional ecosystem analysis to help communities plan for development. Less than two years later, the idea comes to fruition.

## 2005

- ☀ Catawba College environmental science students spearhead a Campus Greening Initiative. Their proposals, many of which have been implemented, range from water and energy conservation to policies which ensure that all buildings constructed on campus will meet Leadership in Energy and Environmental Design (LEED) criteria.

- ☀ An international delegation travels to the Center to learn about environmental education and community participation in environmental efforts. Delegates are from Finland, Pakistan, Zanzibar, Uruguay and Eritrea.

- ☀ The Center and Catawba's environmental science students are featured in the nationally broadcast PBS program, "Simple Living with Wanda Urbanska." Urbanska says she chose the Center because "it offers one of the premiere environmental education programs in the nation in a unique physical setting."



The Center was featured in the national PBS program "Simple Living with Wanda Urbanska."

- ☀ Russian professionals come to the Center to discuss common environmental concerns with Dr. John Wear and selected students. The delegation's visit is part of Open World, a 10-day professional exchange that attempts to foster understanding and collaboration between Russia and the United States.

- ☀ Students in the Campus Greening Seminar research green technology and products for Ramsey Burgin Smith Architects as the firm refines plans for renovation of an addition to Corriher-Linn-Black Library on the Catawba campus.

## 2006

- ☀ The Center orchestrates an air quality conference – "Clean Air: Community Strategies for Action" – to offer a forum for participants to help their communities find reasonable solutions to air quality challenges. Current students and recent graduates engage in a facilitated discussion about air quality issues and what students can do on campus and in the community to help clean up the air.

- ☀ The internationally syndicated science

radio program "Earth & Sky" broadcasts part of an interview with director John Wear on 1,000 radio stations across the globe. The series has 10 million weekly listeners.

- ☀ The Center spearheads Salisbury's first Earth Day/Sustainability Showcase. Partners for the event include the Downtown Salisbury Association, the entire Catawba campus, the LandTrust for Central North Carolina, the Charlotte Chapter of the U.S. Green Building Council, the "Simple Living" TV Network, Carolinas EcoCrescent, Environmental Defense, Land for Tomorrow, the Southern Appalachian Biodiversity Project, the N.C. Solar Center, the Charlotte Chapter of the Sierra Club, plus many sustainable businesses. The event promotes sustainability and environmental stewardship, educates the public and showcases sustainable options.



The Ugly Bug Balls raise funds for the Center.

- ☀ The Center hosts its first Ugly Bug Ball, a fund-raising event that features a local farm-fresh dinner, silent auction and dancing.

## 2007

- ☀ The Center hosts a conference in April for business and community leaders

on creating recycling programs that turn a profit and create new jobs.

- ☀ Catawba College's 189-acre ecological preserve is approved as part of the N.C. Birding Trail, a guide that links bird-watching sites across the state. More than 170 species of birds have been sighted on the preserve.
- ☀ Catawba College begins offering environmental degrees in the fall that focus on business and education. Majors in Sustainable Business & Community Development and Environmental Education are added to the environmental program. The Center hosts presentations from thought leaders and workshops that support both of these new degree programs.

- ☀ Catawba joins nearly 300 other colleges and universities nationwide in supporting the American College and University Presidents' Climate Commitment. Participating institutions of higher education agree to "exercise leadership in their communities and throughout society by modeling ways to minimize global warming emissions and by providing the knowledge and the educated graduates to achieve climate neutrality."

- ☀ The Third International Hydrail Conference is held at the Center facility. Stan Thompson, who spearheaded the event, later tells the Center that the ideas promulgated at that and subsequent conferences have had a large impact on climate stabilization. "The lesson from this is that a...modest-sized private college can make a dramatic difference in the world's environment by doing what institutions of higher learning were created to do: bring new knowledge into the world," he said.

## 2007-2008

- ☀ The Center provides Sustainable Communities Leadership Workshops for area organizations.

## 2008

- ☀ More than 300 people attend an interfaith conference and forum in May on Faith, Spirituality and Environmental Stewardship at the Center. It was one of the first and largest of its kind in the Southeast.



Brochure for interfaith conference

- ☀ The Center receives a \$1.2 million grant from the North Carolina Department of Transportation over four years to implement its Clean Air Initiative.

- ☀ More than 600 people attended a presentation by Lester Brown, founder of Worldwatch Institute and current founder and president of Earth Policy Institute.

## 2009

- ☀ The Center launches the Campaign for Clean Air, designed to empower citizens in Rowan and Cabarrus counties to address the air quality issues the region faces. The campaign focuses on education about air pollution's impact on our health and economy and actions that reduce air pollution.

## 2010

- ☀ Amory Lovins, Rocky Mountain Institute's chairman and co-founder, speaks to nearly 700 people at Catawba College. The event is hosted by the Center for the Environment.

- ☀ The Center's Campaign for Clean Air



conducts gas cap checks in the region, providing free replacements to those who have leaking caps.

- Center receives a grant to launch the Catawba College Energy Corps. The \$184,000 grant from the N.C. Energy Office's Student Energy Internship and Fellowship Program is used to facilitate the placement of students or recent graduates in on-the-job internships and fellowships at businesses and organizations in the energy sector that are considered to be at the forefront of the state's transition toward sustainability.

- Sarah Susanka, best-selling author of *The Not So Big House* and *The Not So Big Life*, speaks in March on the Catawba campus. The event is co-sponsored by the Center for the Environment and the College's Lilly Center for Vocation and Values.



Susanka speaks about the value of living simply.

- Center Director John Wear contributes an essay entitled "Creating the Educational Foundations for Change" to the newly released anthology *Less is More: Embracing Simplicity for a Healthy Planet, a Caring Economy and Lasting Happiness* by Cecile Andrews and Wanda Urbanska.

- The Center establishes the Green Education Outreach (GEO) program. Students who are accepted into the GEO program act as representatives of the Center with the task of planning, developing and implementing educational outreach programs.

## 2011

- Fred Krupp, president of the Environ-

mental Defense Fund, and co-author Miriam Horn speak on "What's Next for the Clean Energy Revolution?" Krupp and Horn wrote *Earth: The Sequel – The Race to Reinvent Energy and Stop Global Warming*.

- The Center holds its first National Environmental Summit for High School Students, an intensive experience designed to help students gain knowledge and develop skills needed to become environmental change-makers. It offers nine annual summits before the Covid 19 pandemic temporarily shuts the program. Rocky Mountain Institute (RMI) partners with the Center and provides several staff members as part of the team of instructors all nine years the summit is held.

- The Center hosts Matthew "Quint" Redmond, designer of Agriburbia, a concept of combining farming and gardening with residential development and begins working closely with a developer in the planning of a development that embodies these principles.



Community members attend one of many EnviroMingles™.

- The Campaign for Clean Air develops a toolkit for schools who want to initiate No Idling Programs on their campuses. The toolkit is posted on the Campaign's website: CampaignForCleanAir.org. The N.C. Air Awareness Program, a public outreach and education program of the N.C. Division of Air Quality, adopts this toolkit as a model for schools throughout the state.

- The Center launches EnviroMingles®, events for people with an interest in

creating a more environmentally sustainable future. They are a time for mingling and networking, sharing ideas and meeting individuals involved with the Center's activities and programs.

- Urban designer David Walters speaks in March on "Signposts to Surviving the 21st Century: Air Quality, Carbon Emissions and Community Design."

- The Center hosts and facilitates a workshop for transportation directors and other transit professionals called "Breaking Down Barriers to Collaboration in Public Transportation."

- The Center partners with Davidson College Professor Cindy DeForest Hauser and her research students to measure ozone and nitrogen oxide concentrations in seven counties: Rowan, Cabarrus, Mecklenburg, York, Iredell, Gaston and Davidson. The project demonstrates that the pollution levels are fairly consistent throughout the region.



Dawn Grant with neighborhood air monitor.

- The Center co-sponsors Salisbury's First Fit Community 10K, 5K and Fun Run in April. The Center provides information on the health risks of poor air quality and the link between air pollution and asthma.

## 2012

- The Center receives one of four 2012 N.C. Mobile Clean Air Renewable Energy Awards from the N.C. Solar Center.

- The Campaign for Clean Air offers a toolkit for Gas Cap Events on its website. Replacing gas caps on older cars dramatically reduces the release of volatile organic compounds (VOCs)

into the atmosphere.

- The Center and the Green Education Outreach (GEO) Team showcase alternative-fuel vehicles at Catawbapalooza, a week-long spring celebration at the College.

- Catawba College's 189-acre environmental preserve is named for environmental champion Fred Stanback in November in a special surprise ceremony honoring the longtime benefactor and advocate of the Center for the Environment.

- Catawba establishes the Green Revolving Fund (GRF) that loans money to finance on-campus investments in clean energy and energy conservation. The GRF captures the savings from lower utility bills and uses that money to reinvest in more energy-efficiency projects.

## 2013

- Catawba is one of only 21 colleges nationwide to earn the highest possible score in the Princeton Review's 2013 Green Rating Honor Roll. The magazine notes that a survey in 2012 revealed that 68 percent of college applicants said having information about a college's commitment to the environment would impact their decision to apply to or attend a school.

- The Center begins holding presentations on the importance of local foods and nutrition and health.

- The Center's Campaign for Clean Air offers Faith, Spirituality and Environmental Stewardship Workshops. Nancy Sleeth, acclaimed author and program director of Blessed Earth, speaks at the first event. The workshops offer people who have implemented air quality improvements and other green projects in their faith communities the opportunity to share their experience

with those who want to learn more.



Nicole Magrita, Dr. Chris Magrita and Dr. Chris Nagy tout the benefits of healthy eating.

- The Center's Campaign for Clean Air posts online lesson plans and activities teachers can use to help their students learn about ways to improve air quality.

## 2014

- The Center joins forces with the Rowan County Chamber of Commerce, RowanWORKS and Rowan-Cabarrus Community College to offer sustainable business workshops called "Sustainability Driving Business Success."

- The Center brings prominent speakers to the campus: Ken Cook, founder and president of the Environmental Working Group based in Washington, D.C.; Dr. Patrick Angel, senior forester and soil scientist for the U.S. Department of the Interior's Office of Surface Mining; Rick Dove, an award-winning former Riverkeeper; Dr. Marisa Weiss, founder and president of breastcancer.org; and Dr. Francis Koster, author of *Discovering the New America: Where Local Communities are Solving National Problems*.

- The Bill Stanback Birding Loop was established on the Fred Stanback Jr. Ecological Preserve. Bill Stanback was honored in a special ceremony for his decades-long commitment to land and wildlife preservation and his special interest in birds.



Jay Leutz, Ken Cook and Reid Wilson discuss what's at stake with the farm bill in Congress.

## 2015

- The Center provides information and helps facilitate the planning for the college's massive solar project, which provides nearly one megawatt of solar electricity for the campus. The eight new solar electric systems generate more solar electricity than that produced by all the other colleges and universities in North Carolina combined in 2016.



Workers install solar panels over the athletic field parking lot.

- The Center partners with SmartPower, a national non-profit organization that focuses on clean energy, to promote Solarize Salisbury-Rowan, a community initiative designed to inform residents of the advantages of solar power for their homes and businesses and to reduce costs through competitive bids by pre-approved installers.

- A bike-sharing program is launched when 12 bicycles, purchased with money saved through water conservation in Catawba residence halls, become available to students on campus. They check the bikes out much the same way they check out books from the library. Environmen-



tal Steward Dan Couchenour started the “A Gallon a Day” program in 2013 when he challenged students to conserve water. The following year, the money saved through lower utility bills was used to purchase the bikes. Environmental Steward Joel Schlautdt assisted Catawba’s Office of Student Affairs in setting up the checkout program.

- ☀ The Environmental Working Group (EWG) joins the Center and Rocky Mountain Institute (RMI) as a partner in the Fifth Annual National Environmental Summit for High School Students at Catawba. EWG and RMI present students with real-world problems and ask them to think critically and creatively about how to solve them.



Heather White engages students during National Environmental Summit.

- ☀ The Center assumes the leadership of the NC Green Schools program, a non-profit organization that promotes sustainability in the state’s schools from pre-kindergarten through 12th grade. It helps teachers connect and share ideas, offers resources and tools to help them start green initiatives and recognizes schools that meet specified goals. Katie Cavert Ferrell, who has worked for two years with the NC Green Schools program, continues as the coordinator.

- ☀ The Center lends its expertise to discussions about a comprehensive sustainability plan for the college.

## 2016

- ☀ The Center hosts a number of

stellar thought leaders, including Dr. Robert Musil, president and CEO of the Rachel Carson Council; Joshua Kolling Perin, director of public engagement at WasteZero, the nation’s largest waste reduction company; Dianna Cohen, artist and co-founder of Plastic Pollution Coalition; Dr. John Daniels, chair of the Duke Energy National Ash Management Advisory Board and chair of the Department of Civil and Environmental Engineering at UNC Charlotte; and Christian Hunt, program associate for the Defenders of the Wildlife’s Southeast Region.

- ☀ Nearly 200 citizens attend a presentation by the internationally renowned Dr. Paul Erhlich and Dr. Pete Myers in October. Erhlich, prize-winning American biologist known for his warnings about the consequences of population growth and limited resources, and Myers, founder and CEO of Environmental Health Sciences, spoke on “The Current Mass Extinction Event: Causes and Cures.” Erhlich is Bing Professor of Population Studies and Emeritus President of the Center for Conservation Biology Stanford University.



Dr. Pete Myers is actively involved in work to anticipate the interactions among biogeochemical forces set in motion by humans.

- ☀ Consumer advocate Erin Brockovitch draws an audience of nearly 1,000 in November for a presentation entitled “Community Power: How We Can All Make a Difference in Creating a Healthier Planet.” Brockovitch is best known for her involvement in one of the largest direct-action lawsuits in U.S. history. Her story is

featured in the 2000 movie, “Erin Brockovitch.”

- ☀ Catawba College receives the 2016 Susan W. Kluttz Sustainable Salisbury Award in March. The college is commended for its sustainable efforts – everything from LEED certification for five residence halls to its landmark solar installation, which is projected to save the campus nearly \$5 million over 20 years.

## 2018

- ☀ Energize NC, a partnership between the Center for the Environment and the Central North Carolina Council of Boys Scouts of America, collaborate on Energize NC, a one-of-a-kind STEM program that prepares today’s youth for tomorrow’s North Carolina jobs in renewable energy. The Center develops modules that cover topics such as thermodynamics, passive solar design, biofuels, conservation practices and more.



Madison Kluge explains to Energize NC students how a bioreactor can take food scraps and other wastes and produce gas for cooking and heating.

- ☀ A number of changemakers speak at the Center: Nancy Adamson, pollinator conservation specialist with Xeres Society, on “The Value of Native Bees”; Ken Cook, CEO and founder of Environmental Working Group, Dr. Sue Calcagni, associate professor of biology and environmental science at Catawba, and Dr. Maria Vandergriff-Avery, professor of sociology at Catawba, in a discussion following

film screening of “The Devil We Know”; Mark Plotkin, founder of the Amazon Conservation Team, on “Rainforest Conservation, Climate Change and the Search for New Jungle Medicines”; Kyle Snyder, director of the NextGen Air Transportation Consortium at N.C. State University, on “How Drones are Opening the Skies for Scientists”; Andrew Stein, National Geographic Explorer and founder and director of CLAWS, on “Can a Story Save the African Lion?” (co-hosted with the Department of Environment and Sustainability); Ben Prater, Southeast Program Director of Defenders of Wildlife, on “The Endangered Species Act: A Conservation Legacy with an Uncertain Future”; Ivan Urlaub, executive director of the N.C. Sustainable Energy Association, on “Solar Now and in the Future”; Stephanie Foote, Jackson and Nichols Chair and professor of English, on “Garbage Humanities: Environmental Thinking and the Future of the Humanities” (co-hosted with the English Department); Dr. Luke Dollar, chair of Catawba’s Environment and Sustainability Department, on “School Saving Species: Grassroots Science, Economics and Education as Drivers of Carnivore Conservation”; Doug Smith, project leader for the Yellowstone Wolf Project, on “The Wolves of Yellowstone: The First 20 Years.”

## 2019

- ☀ Amory Lovins, world-renowned thought leader, speaks to a crowd of more than 300 people at Catawba College April 17 on the topic of “Transforming the Energy System for Security and Prosperity.” He is the chief scientist, co-founder and chairman emeritus of Rocky Mountain Institute.
- ☀ David Orr, award-winning scholar, teacher and writer, speaks September 24 at the Center on the

technological, economic, political and spiritual aspects of climate change.

- ☀ Barbara Finamore, cofounder and president of the China-U.S. Energy Innovation Alliance, tells an audience that there is no solution to our climate crisis without China.



Dr. Luke Dollar speaks on “Schools Saving Species: Grassroots Science, Economics and Education as Drivers of Carnivore Conservation.”

- ☀ The Center for the Environment staff is recognized in April by the Boy Scouts of America for its work in co-developing the BSA’s Energize NC curriculum. The program provides STEM education centered on renewable energy and sustainability, focusing particularly on at-risk students, ages 11 to 14. More than 230 students from Kannapolis Middle School, North Rowan Middle School, Knox Middle School, East Union Middle School and A.L. Brown High School have participated in the program.

## 2020

- ☀ Science faculty and Center for the Environment staff begin collaborating on a comprehensive, long-term strategy for the Fred Stanback, Jr. Ecological Preserve. Dr. Andrew Jacobson, assistant professor in the Department of Environment and Sustainability, and Dr. Jay Bolin, chair of the Department of Biology, are leading the effort, which focuses on the future research opportunities, stewardship and management of the preserve.

- ☀ Dr. Mercedes Quesada-Embida, associate professor of Environmental Policy and Advocacy at Catawba, joins the Center as its new director of student engagement.

- ☀ The Center for the Environment launches a new web site. Center Director John Wear enlists the aid of Dr. Pamela Thompson, professor in Catawba’s Math and Computer Science Department, and her Web Technologies and E-commerce class to design and implement the new site.

## 2021

- ☀ The pandemic prompts the Center to offer Summer Explorations, day-long workshops for teenagers, in lieu of the annual National Environmental Summit for High School Students.



Students identify organisms found in vernal pools found on the Stanback Preserve on the Catawba campus. From left: Adjunct Professor Lisa Pope, Riley Crotts, Grace Eppiheimer and Chloe Redfern.



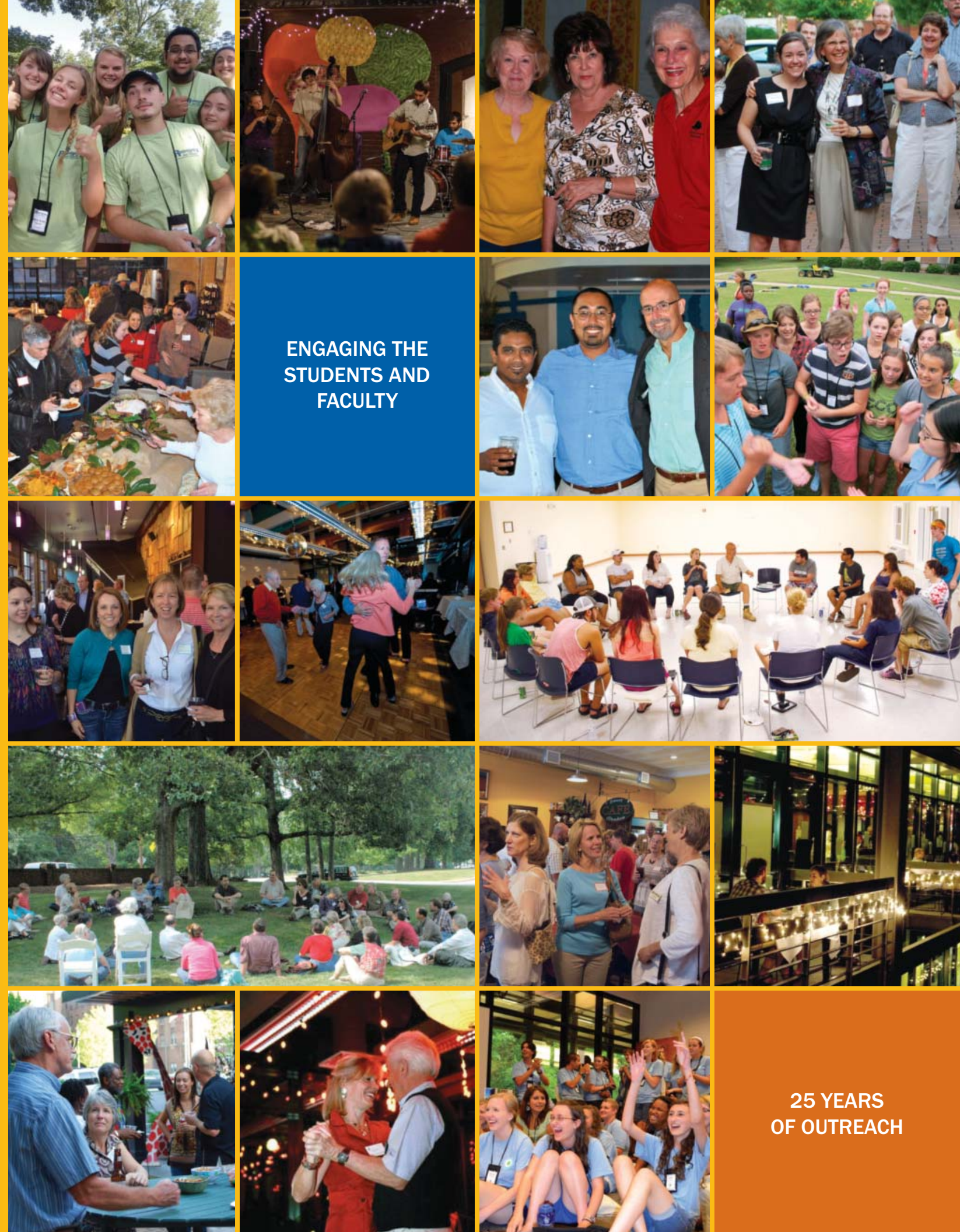


# 25 Years of Support

We are grateful to the thousands of people who have supported us during the past 25 years. While the donors, advisory board members and partners have been vital to our success, we must also thank those of you who have worked with us throughout this eventful journey: Catawba faculty and staff, students, governmental bodies, other environmental organizations, speakers, financial institutions....The list is long.

The point is we clearly didn't do this alone. So very many people shared their expertise or rolled up their sleeves to get things done. They - you - deserve our thanks, too.

So a standing ovation to you all.



ENGAGING THE STUDENTS AND FACULTY

25 YEARS OF OUTREACH