The NC Green Schools program, now under the auspices of the Center for the Environment, recently launched its new website – www.ncgreenschools.org. The program helps teachers connect and share ideas, offers resources and tools to help them start green initiatives and recognizes schools that meet specified goals. “There are so many environmental programs and green school resources available for schools that it can be pretty overwhelming,” says Katie Cavert Ferrell, the program’s coordinator. “Our goal is to make it easier for teachers to find what they are looking for, whether it’s about establishing a school garden, conserving water and energy or starting a student-run recycling program.”

(For more on NC Green Schools New Website, go to page 8.)

Catawba College received the 2016 Susan W. Kluttz Sustainable Salisbury Award in March. “This community is especially proud of the commitment Catawba College has made to being a role model for stewardship of our valuable resources,” said Mayor Pro Tem Maggie Blackwell.

Catawba President Brien Lewis and the Center for the Environment are leading the effort. “We need to constantly keep the sustainability beacon on our radar so we don’t miss an opportunity to include it in all we do,” Lewis said, “and we need to communicate effectively to all of our audiences how important it is to us.”

Catawba Receives Susan Kluttz Sustainable Salisbury Award

“From the nationally recognized Center for the Environment to the many other efforts that have become an integral part of their campus culture, Catawba College is a pacesetter in sustainability initiatives,” she said. The college was 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 the next 20 years. Catawba has realized savings in waste reduction and energy and water conservation. The college integrates environmental issues across the curriculum and has received national recognition from the Princeton Review as one of the country’s most environmentally responsible “green” colleges.

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Center’s NC Green Schools Program Launches New Website

Students at Carolina Day School form an image of the earth, a symbol of the school’s dedication to becoming an NC Green School of Excellence in 2015.
NC Green Schools Program Encourages Stewardship of the Earth

By Dr. John E. Wear, Jr.

We are excited about our new initiative, the NC Green Schools Program. It clearly fits the Center’s mission of educating the public about environmental stewardship and providing value-added education for our college students. And it promises to advance the cause of sustainability throughout the state.

I am impressed with the schools that have already achieved the NC School of Excellence designation. Carolina Day School in Asheville is doing a marvelous job of teaching a respect for the environment through multiple activities. Think of how exciting it would be to send your child to a school that encourages its students to make a solar oven or grow vegetables in a hydroponic garden or study salamanders in their outdoor phenology lab. This kind of experiential learning will stick with these children for the rest of their lives. You may forget what you read in a book, but you don’t forget your experience of growing vegetables or witnessing a butterfly emerge from a cocoon.

Other schools – Rainbow Community School and Queens Creek Elementary – are highlighted for their good work in this issue as is Salisbury Academy, which is applying for NC Green School status this spring.

One of the extra benefits of this program is that it gives our Catawba students opportunities to hone their leadership skills as they assist with the program. This hands-on learning enhances their education as well.

Creating opportunities for children that facilitate an appreciation for the earth and its inhabitants is critical to fostering environmental stewardship in adults. One of Rainbow Community School’s guiding principles includes this important sentence: “Children who have a relationship with nature will take care of it.” How very true.

I can visualize thousands of children all over North Carolina who grow to love the natural world as a result of their schools’ focus on environmental learning. We are proud to be a part of this vital effort.
John Campbell, WasteZero chairman of the board, told an audience at the Center on February 23 that America has the ability to cut trash in half, right now, through his company’s “pay as you throw” (PAYT) program.

The program WasteZero created is simple – instead of having to pay a fixed fee for garbage disposal and recycling removal, it makes recycling pickup free and charges by the bag for trash disposal. With this program, residents pay a small fee, say $1 per bag, and the bags are regulated sizes but easily still available to pick up at local supermarkets. By incentivizing what is good for the earth, and generally saving people money, the program has had success in more than 800 municipalities across the country.

Rachel Carson Left a Legacy for North Carolina

Dr. Robert Musil, president and CEO of the Rachel Carson Council, talked about environmental advocate Rachel Carson’s legacy for North Carolina February 11 at the Center for the Environment facility.

Carson’s most famous book, Silent Spring, published in 1962, exposed the harmful effects of DDT. “It was all about human health and the effects of DDT and other chemicals on us,” Musil said. “She was concerned about chemicals’ effect on the birds and the bunnies and the penguins and the peregrines on the one hand. But she was also concerned about what things in the environment do to people. She said we can’t separate them – that all of creation is linked, is interwoven. Everything affects everything else.”

The effects of various toxic chemicals in our food and in our products, which can exacerbate or lead to developmental problems, are still a major issue, Musil said. He also mentioned in a Q&A with the Center that climate change, sufficient clean water and overpopulation are issues we should address.

“Rachel Carson faced very similar things,” Musil said. “Things looked pretty bleak in 1962, but it was part of Rachel’s upbringing and her belief that she couldn’t sit and let this all happen. She said to her best friend, Dorothy Freeman, quoting Lincoln, ‘Remaining silent when they should protest makes cowards out of men.’ If people love and care about what is closest and dearest to them, then they have to do something about it.”

Does your business want to be a sponsor of NC Green Schools?

Contact Cathy Green at cgreen14a@catawba.edu or 704.637.4791.
Carolina Day School

Asheville’s Carolina Day School (CDS) made an overarching commitment to the environment and sustainability in 2009. It received NC Green School recognition in 2015.

Dedicated to making the school a healthier place by building and using outdoor classrooms, CDS has created gardens and built a natural area with river stone for the Lower School children. Environmental issues receive attention in more than science classes. Their efforts include everything from planting vegetables from seed to watching monarchs grow from caterpillars to butterflies, from making solar ovens to creating a salamander phenology lab. (Phenology refers to key seasonal changes in plants and animals from year to year.)

“One of our teachers inherited a hydroponic tower garden and has done a beautiful job of engaging our students in this process of growing foods indoors,” says CDS Key School Principal Diane Milner. “The students have grown a variety of garden vegetables and look forward to our ‘salad days’ in our Key School division.”

Science teacher Miguel Flamini helped students explore alternative energy sources. They designed a solar panel to provide the energy source for the Key School’s tower garden.

The school’s latest venture is up-cycling the Lower School’s original building, constructed in 1956. “We are using innovative ideas to save energy and improve air quality,” Milner says. Work on the building will be completed this summer.

“Being an NC Green School offers our school a framework for continuing to grow our green initiatives,” Milner says. “We believe that we must teach our students to respect and love their planet and to be sure to leave it in great shape for future generations.”

Rainbow Community School

The five acres of Rainbow Community School (RCS) are becoming an urban oasis in West Asheville. “The recent campus expansion yielded some additional green space, and we are working on the development of the RCS Environmental Learning Center,” says West Willmore, RCS curriculum director.

Plans include a nature trail, native habitats, Citizen Science way stations and storm water management technologies. “We plan to integrate a sizeable native habitat area that focuses on attracting many species of birds and (For more on NC Green Schools of Excellence, go to page 5.)
trees, shrubs, herbs and flowering plants will offer students multiple opportunities to learn about nature.

“The natural world serves as an important teacher in the lives of all our students,” Willmore says. “One of our guiding principles is that through understanding nature we understand ourselves; therefore, the learning environment extends into the natural world, and children spend as much time outside as possible.”

Teachers and administrators at RCS know that “children who have a relationship with nature will take care of it,” Willmore says.

As a designated Ashoka Changemaker school, Rainbow strives to help children solve challenging problems and effect positive change on the local, national and global level. “Rainbow’s mission and vision incorporate learning that has, at its heart, a desire to instill a love for self and a love for the planet in a changing world,” Willmore says.

Queens Creek Elementary School

Integrating sustainable practices in the learning environment is part of Queen Creek Elementary School’s culture. The school’s staff and students practice energy-efficient measures and recycle and compost on a daily basis.

Teachers also integrate environmental studies into their lessons. The fourth graders are currently writing business letters to area restaurants as part of their support of UNC-Wilmington’s Plastic Ocean Project. They are asking the restaurants to limit the use of plastic straws, taking an “upon request” approach to reducing the number of straws that find their way into the oceans.

Each grade has a garden where students “learn the connection of farm to plate and service to others,” says Cathy Dalimonte, assistant principal. Fresh greens from its garden go to its ecumenical resource, The Hem of His Garment.

QCE, located in Swansboro, participates in Terracycle, an organization which takes items that would otherwise be thrown away. With the points they earn from this project, they support sustainable activities around the world, like Heifer International and Charity: Water, which provides clean water to impoverished areas.

“Students are internalizing these practices and bringing them into their homes and local community,” says Elaine Justice, Queens Creek principal. “As we tell parents, it’s a great thing to help save a rainforest, which we support,

(For more on NC Green Schools of Excellence, go to page 6.)
but what we are really trying to do is to engage students in their local environment, the coastal region. “It is our belief that if we can raise children to make a difference in their immediate world,” she says, “we will raise adults who will make a difference in the global world.”

Salisbury Academy Applying for Green School Status

Salisbury Academy’s mission already includes a commitment to helping students become “stewards of the community and the environment,” and the school offers classes in global and environmental education. So applying for NC Green School status was a natural extension of the path the school has already charted.

The Academy will submit its application this year. Both students and teachers at the school have been engaged in the process. In addition, the school has hosted two round table discussions with community environmental experts to further develop its sustainability plan. It has also developed several partnerships in the community to help teachers and administrators with the process, including a local farm and a farm-to-table non-profit organization.

“Our next major step is to finalize our plan with N.C. State University’s Natural Learning Initiative to create our outdoor space of the future,” says Mariana Sanchez, Salisbury Academy’s Green Schools coordinator.

“Over the course of our Green School journey, it has been inspiring to watch students take ownership and leadership of this process with the teachers and staff serving in support roles,” Sanchez says. “The students are proud to be agents of change and are empowered by their ability to create a sustainable future for our world.”

Did you know that the Center for the Environment was a partner in the production of America’s first national television series advocating sustainable living?

Simple Living with Wanda Urbanska was produced in partnership with the Center for the Environment from 2004 through 2008. Originally aired on PBS stations nationally, the show reached 75 percent of U.S. TV households, and now it can be viewed online.

“The messages of this series are enduring and needed today more than ever as we face unprecedented environmental crises,” says Wanda Urbanska. “The Center staff – and Dr. Wear in particular – deserves enormous credit for making this important contribution to the American media landscape.”
Editor’s Note: This is an excerpt from a story by Hannah Davis posted on the Center for the Environment website in March 2016.

Senior Pam Casdorph is leading a team of Environmental Stewards who are trying out new gardening techniques in the Catawba greenhouse this spring.

With the help of the Stewards, she is using hydroponic and straw-bale gardening to germinate seeds for the sustainable garden and a future butterfly garden on campus.

Hydroponic gardening is simply an agricultural technique that uses almost everything but soil to grow plants. Some types of replacement soil include sand, gravel or water with added nutrients. This type of gardening is most famous for being used by NASA in their attempts to grow plants in outer space.

The team – Hannah Davis, Hannah Przelomski, Nick Frotten, Doug Taylor and Brittany Parsons – is using straw bales to grow potatoes, carrots, basil and other vegetables and seasonings. It is important to use straw bales – not hay bales, which contain seeds that would become weeds. To build up nutrients in the straw bales so that plants will grow, it takes around 12 days of conditioning the new bales with nitrogen, potassium, water and other organic matter to mimic natural topsoil and decompose the bales.

Casdorph was influenced by her mother who encouraged young Pam to learn about growing her own food by helping tend the family garden. Today she believes that “as an Environmental Steward it is a part of our responsibility to help everyone become aware of growing issues in our world [and] one of those issues is being able to provide quality food to an ever-growing population.”

With this greenhouse project, Casdorph hopes to continue her mother’s legacy of teaching others about the importance of good, homegrown food.

You Can Help: National Environmental Summit

You can play an important role in the recruitment and funding for this year’s National Environmental Summit for High School Students, scheduled for July 12-16.

First, if you know high school students who would benefit from this intensive experience, we hope you will encourage them to take advantage of this opportunity. They may visit www.CenterForTheEnvironment.org to register or to learn more.

Second, if you know of a person who would like to fund a scholarship or a business that would like to be a sponsor for the event, please contact Cathy Green at cgreen14a@catawba.edu or 704.637.4791.

With your help, we will enroll another class of eager learners this summer and continue to help students develop the skills they need to become tomorrow’s environmental leaders.
NC Green Schools New Website
(Continued from page 1)
The website also highlights success stories so that schools can see what others are doing. “We will continually share new opportunities,” Cavert Ferrell says, “like how schools can get involved in the NC Solar Schools Challenge.”

Eight schools have met the criteria to be an NC Green School, and Salisbury Academy is applying this year. “I really hope we can boost that number to 20 total green schools by the end of the next school year,” Cavert Ferrell says.

“I know there are many more schools out there with robust environmental education programs, hands-on learning opportunities and green, efficient buildings. I am so proud of the students, teachers and administrators at these schools; of course, but I also want to recognize all the green school coordinators who dedicate time and energy in leading their schools to become an NC Green School.”

Cavert Ferrell views the leadership provided by the Center for the Environment as an opportunity to connect to more schools across the state. “We hope to double our daily audience with our new website,” she says. “I hope everyone who is interested in green schools will check it out.”

Seventh and eighth-grade students at Rainbow Community School helped fourth graders construct a wigwam for their archaeology unit.