



Maryville College
2014 - 2015

environmental
initiatives report



"We are modern day stewards of an old and beautiful campus and all that it includes. We fulfill that obligation best when we apply sound and sustainable practices to our use of energy, space, forest, grounds, buildings, water, people, food, and so forth. The environmental initiatives outlined in this report are examples of our current efforts to be good and faithful stewards of Maryville College." Vice President and Dean of Students Vandy Kemp puts it best when she describes Maryville College's dedication to sustainability on campus. The 2014-2015 Environmental Initiatives Report is the first of its kind, outlining every eco-friendly and sustainable effort practiced on our campus. Throughout its two-hundred year-long existence, Maryville College has become known as a social leader and innovator among institutions of higher learning. Our dedication to the well-being of our students and the environment is only the latest example of our dedication to progress. But our journey towards sustainability is only in its beginning stages, and student, staff, and faculty alike are all set on seeing our campus sustainability standards rise to even greater heights.

"In every situation we are entrusted with resources and have the responsibility to make good decisions about how best to use them. At Maryville College, this heritage is clearly seen in examples like the College Woods, the beautiful campus, and the historic buildings. I believe that we should aspire to leave every situation better than we found it. While that is a tall order at an institution with the strong track record of Maryville College, it is a challenge that I see the entire community welcoming."

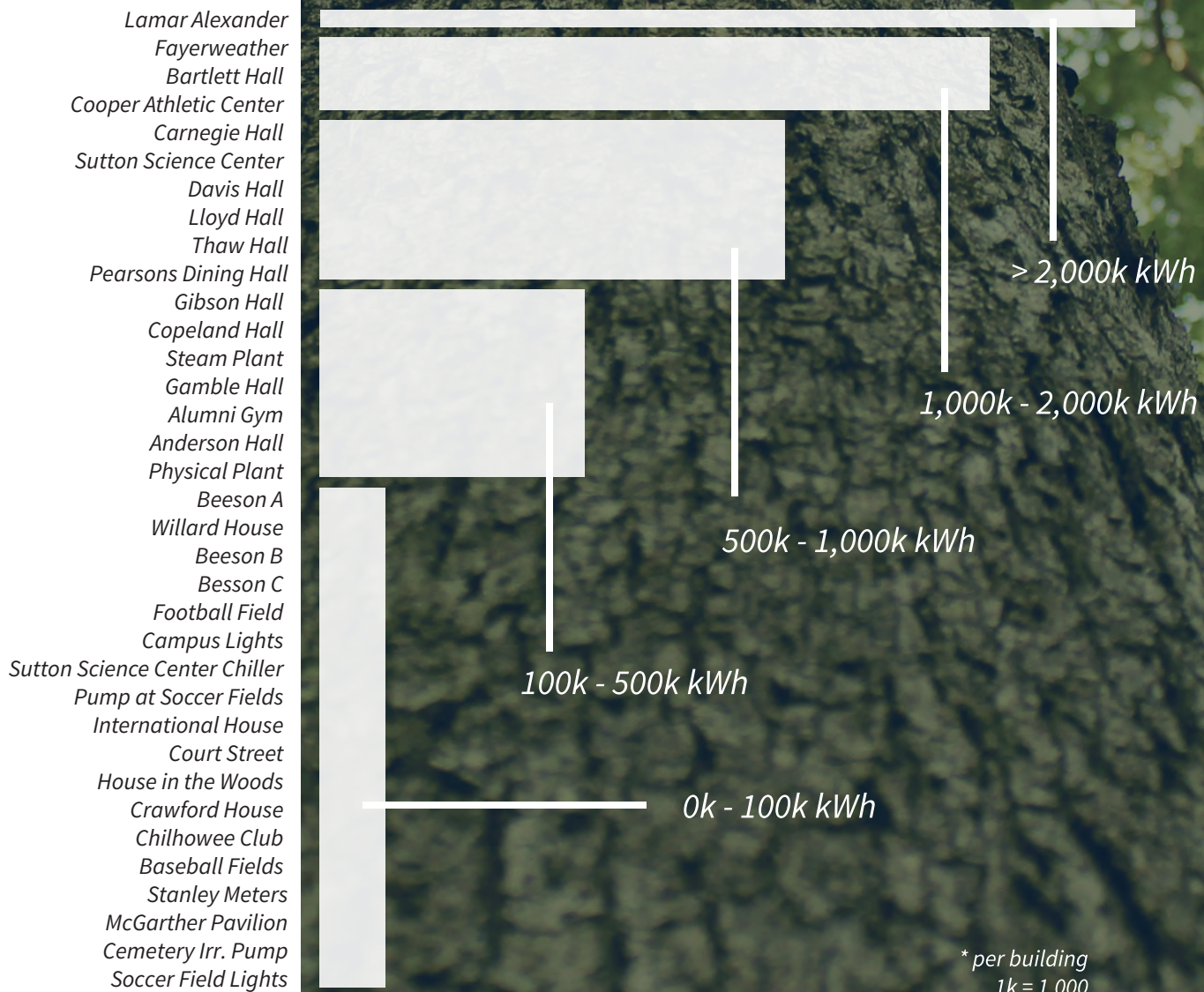
Tom Bogart, President of Maryville College, 2010 - present

introduction

1	<i>The College Woods</i>
9	<i>The Steam Plant</i>
13	<i>Mountain Challenge</i>
21	<i>Crawford House</i>
27	<i>Metz Culinary Service</i>
31	<i>Campus Recycling Program</i>
35	<i>Environmental Education</i>
45	<i>Special Features</i>

statistics

building usage chart





The College Woods provides 140 acres of green space packed with biodiversity reflective of the neighboring Appalachian Mountains. Thomas Jefferson Lamar bought the woods' land for \$21 an acre and then sold it to the campus for a mere \$1 per acre in 1881. Over the years, the woods saw many changes, including the construction of the House in the Woods for the college's first pastor, Dr. Stevenson, in 1917. Fifteen years later, Morningside Inn, the future Ruby Tuesday Lodge, was built for Stevenson's sister-in-law Mrs. Susan Walker. She also oversaw many beautification projects in the area, such as the creation of the amphitheater and complementary seven acre botany garden in 1935.

The most recent architectural addition to the forest occurred in 1988 with the construction of the Mountain Challenge Ropes Course. The corporate owner of the company Sea Ray Boats elected to donate money to have a ropes course erected in the College Woods. Previously, many of the Mountain Challenge excursions utilized the Wesley Woods facilities, so having their own ropes course right on campus was no small gift. The course is used by students on campus and outside organizations alike for its array of teamwork-building obstacles and challenges.



the c



college woods

HISTORY



ADVENTURE



From hiking the Log Bridge and Spring House Trails, to exploring Brown's Creek and Duncan Branch, there's more than enough adventure to keep a curious college student busy. Bird watching and bike riding are some other popular activities, as well as the brand new nine-hole disc golf course. And if you're local, you can even take your pets on a walk through the trees, provided they stay on a leash. The College Woods is the largest protected green space in Maryville. In order to keep it beautiful and healthy, a specific set of rules and guidelines for the use of the woods was established in 2005.

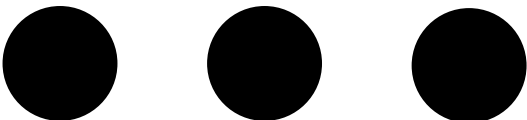


This Maryville treasure was made a Tennessee Stewardship Forest in the year 2000 after a 1991 survey spurred the creation of the first stewardship plan. Dubbed the "Maryville College Forest Stewardship Plan" this outline broke up the forest into sections based on tree species, soil content, and other biological factors. It also provided suggested care practices for each stand based on its individual needs. The updated 2013 version takes into account the growing problem of invasive species and includes specific recommendations for how to control the English ivy, bush honeysuckle, and Chinese privet that seem to be taking over the woods. Partnering with the University of Tennessee, College Woods advocates have conducted research studies concerning these invasive species and are working on a plan for reducing them.



EDUCATION

Dr. Drew Crain and Dr. David Unger, professor and assistant professor of Biology at the College respectively, as well as many of the other natural science professors frequently use the forest as an educational tool to show students the impact of fragmented ecology. Some ecology and evolution classes even spend time clearing out these dangerous invasive species. Also, many students use the woods as the setting for their own personal research projects or even their senior thesis. One student, Natalia Mock, used the woods' waterways to study the effects of the College Woods on stream ecology, observing water chemistry and biodiversity levels. This project is among many that focus on the different types of wildlife found in the woods, including observations of box turtles, salamanders, flying squirrels, and gray squirrels. These projects bring the philosophy of sustainability and the Maryville College dedication to scholarship together to create a fantastic learning environment.





One of the most exciting ongoing projects in the College Woods is the orchards, which were planted in 2012. According to Dr. Crain, the primary purpose of the orchards was to educate students on how easy it is to grow your own fruit in a suburban environment. He wants the students to learn about healthy foods and obtain an appreciation for where they come from. From a more scientific perspective, Crain says that they wanted to compare the success of the three stands of trees- the Brown's Creek orchard, the knoll orchard above the creek, and the Crawford house plot. First students learn how to plant and care for the trees, and then learn to analyze and evaluate what they see as a way to tie together the two goals of appreciation and scientific inquiry.



the college woods



Dr. Drew Crain has been teaching students at Maryville College in the Natural Sciences Division since the summer of 1998. He believes in using the wide biodiversity in the area as a way to not only teach students about the technical and analytical aspects of biology, but also how to appreciate and care for the environment. Crain is one of the leading faculty members involved in the College Woods 100 Year Plan, and he frequently uses the woods as a setting for his classes and research projects. In addition to his quantitative sciences courses, Dr. Crain also teaches a January-Term course about wildlife photography, a very popular class with the students.

Dr. Andrew Crain

Professor of Biology
B.S. University of Clemson
M.S., Ph.D. University of Florida

1



The College Woods are an integral part of life at Maryville College, with classes and extra-curricular activities alike utilizing all they have to offer. And so in 2013, the Board of Directors passed the 100-Year Woods Plan, a document illustrating the proper care methods for the woods, the guidelines for its use, and the plans for its future. This plan is crucial to the growth and development of the green space. The MC Woods Group, guided by the plan, oversees the usage and health of the woods constantly, with any changes to the region necessitating their approval. "We are now referring to the College Woods as the Central Park of Maryville," says Dr. Crain. "It's unique to have this many acres in a developed city. It's there, and we want to make sure it stays there. We want to make sure the woods are managed to be a healthy forest for students in 2014."



the



Physical Director Andy McCall has a lot to say about sustainability. In his job, he deals with energy efficiency, waste reduction, and sustainable resource use everyday.

To McCall, there is no greater example of this than the Maryville College steam plant.

The plant, which provides heating for 18 of the 22 buildings on campus, burns wood-waste to heat water which provides steam heating through a system of pipes and has been found to make a significant difference in energy usage at the college.

The steam plant was built in 1982 in conjunction with the TN Department of Energy and TVA for the World's Fair, themed Energy Through the Ages. At the time, a wood-fueled steam heating system was virtually unheard of. The exhibit attracted groups from UT, China, and Russia during the fair.





e steam plant

2

HISTORY

According to McCall, the effort to curb energy used stemmed from energy crises in the late 70s and early 80s.

“During this time, a gallon of gas went from 40 cents to a dollar, and everybody thought the world would end.”

A wood-waste burning, steam alternative was exactly what the college needed to circumvent the oil shortage. The steam plant was an ideal alternative because, as a biomass facility, it was sustainable on all fronts. The plant can burn anything from sawgrass to corn stalks and virtually eliminates air pollutants and wood waste.

2



“The big term then wasn’t biomass. It was sustainable, renewable energy sources, and this is all of that,” said McCall.

Today, the steam plant burns several tons of wood chips a day, all of which are provided from the waste wood of Anderson Truss Company and Freirich Saw Mill.

“The wood itself is a waste product. If it wasn’t going to us, it would be dumped in a landfill or illegally gotten rid of,” said McCall.

“I think we were green before people knew it was cool,” summarized McCall, “What we’re doing here is unlike anything that was going on at the time, and it’s still at the forefront of green energy use today.”





the steam plant



mountain

3

Founded by Bruce Guillaume, Mountain Challenge is possibly the most unique educational experience offered at Maryville College. This college treasure came into being in 1986 when Bruce Guillaume decided to make a career out of his passion. In the beginning, Mountain Challenge existed purely as an arrangement between Bruce and the director of the Wesley Woods Adventure facilities until fortune struck. In 1987, the president of the college, following a cabinet retreat with Mountain Challenge, approached Bruce about moving his operation to campus.

HISTOR



tain challenge




In 1993, Mountain Challenge added the Alpine Tower to its facilities. It has grown to be one of the company's most popular attractions.



Y

Fortune struck again later that year when Bruce conducted a ropes course for the supervisors of a Sea Ray Boats plant. The manager of the plant asked Bruce what he would like for his business, and with his help, they secured funding from the Brunswick Foundation to have a ropes course built in the college woods.

By the spring of 1988, the ropes course was operational, and Mountain Challenge was a fully integrated and independent part of Maryville College. Over the two decades, they increased their clientele from 1,000 to 10,000 in 2005, and they expanded their staff from four or five people to their current fifty members. Now, Mountain Challenge can be found in historic Crawford House on the south side of campus.



"We believe that health isn't just physical and that the outdoors plays a monumental role in keeping us mentally and physically fit."



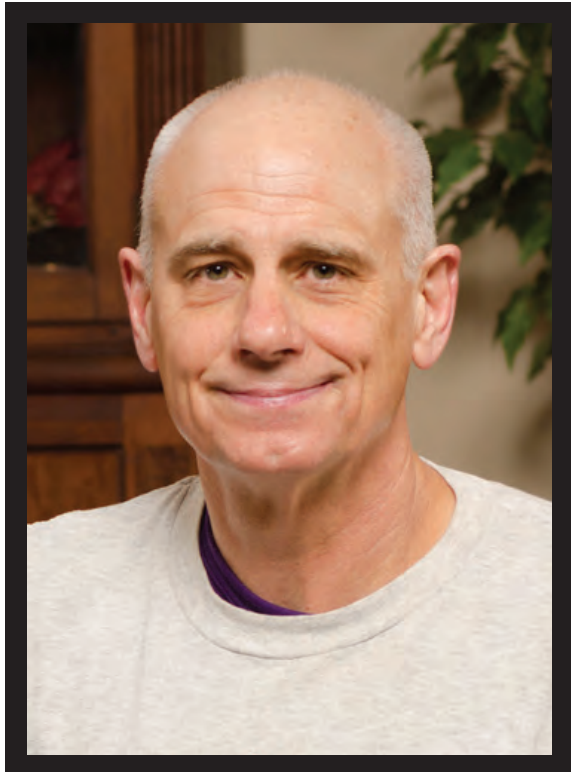


Mountain Challenge has a set of first principles, a set of second principles, and a covenant, written in 2006, that they strive to stick to. These guiding standards are the foundation for the Mountain Challenge way of life. They detail the business's dedication to safety and fun, as well as their code of environmental responsibility.

Today, Mountain Challenge serves all sorts of groups, from Maryville College students to corporations looking for a good retreat activity. With the Alpine Tower, ropes course, yoga deck, and climbing cave right in their backyard, the folks at Mountain Challenge turn work into play. Expeditions like flat water paddling, hiking, trail runs, caving, bicycling, rock climbing, and even surfing trips take the experience off-campus and allow the business to form connections with other like-minded groups. And none of it would be possible without the dedicated staff over in Crawford House.

MISSION





Bruce Guillaume is a graduate of Maryville College with a B.A. in psychology. He continued his education at the University of Tennessee where he received his Master's in social work. Guillaume is experienced in corporate education and has conducted hundreds of seminars and programs for a variety of companies. He is also a member of the League of American Bicyclists, American Mountain Guide Association, and the Association for Experiential Education. In 1986, Guillaume turned his passion for the outdoors into a career when he started Mountain Challenge, a business dedicated to connecting people with the outdoors. In addition, Guillaume also teaches classes at the college including Karate, Maps and Compasses, and Wilderness First Aid.

Bruce Guillaume



Founder/Director of Mountain Challenge
B.A. Maryville College
M.A. University of Tennessee



mountain challenge

"We really are pretty student-run around here," says Bruce. And in truth, Mountain Challenge is the largest business employer of MC students and one of the biggest student-employers on campus, next to the Admissions Office. In fact, there's even a scholarship available to incoming freshmen who want to be a part of the team- the Mountain Challenge Fellowship. The Fellowship is offered to just one student a year.





3

RECRUITME



After submitting an application, potential fellows go through an interview and screening process with each of the staff members to narrow down the selection and see who would fit in.

Once they narrow down the pool of applicants, they send the rest of the files off to Admissions for the final decision. The fellow who is chosen will then start training. It's a progressive process where the student takes on more and more responsibilities each year. They first start with shadowing other staff members to learn the ropes (and the ropes course!). Then, they move on to helping staff with events. After that, they take on the full role of a staff member, and once they reach their senior year, the fellow can even train newcomers.



NT



Recruitment starts in the spring so that training can get underway before orientation. New staffers go through three big training sessions a year, plus shadowing, and spend all summer learning the ins and outs of Mountain Challenge life so that when the new freshmen arrive, they can lead them on the orientation adventures.

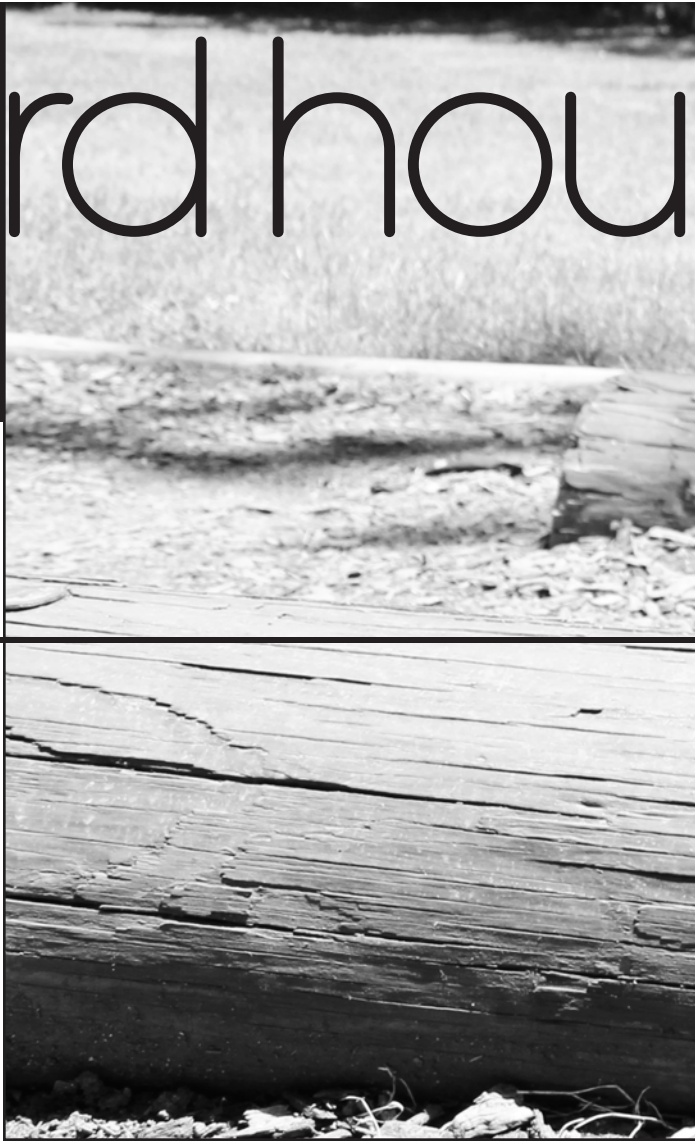
Mountain Challenge is one of the first places that students learn about the College's commitment to sustainable living, and as such is an invaluable asset to the environment.



On the southern side of campus, right in front of the College Woods, is the headquarters of Mountain Challenge and the Environmental Initiatives Office - Crawford House. Built in 1876 for registrar, board member, and professor of mathematics Gideon Stebbins, the historic building was originally named Gideon Crawford House. Crawford House is by far one of the oldest buildings on campus and arguably one of the most unique. In the Fall of 2009, a facility audit from Knoxville-based company Strata-G led to a complete “green renovation” of the house.



crawford hou



4

se

HISTORY

4

crawford house

RENOVAT



- Custom low-E storm windows
- New, efficient HVAC units
- Soy-based foam insulation in the basement and attic
- Linseed-based linoleum flooring in the kitchen
- A solar hot water system
- A 12-panel solar array
- A front porch constructed with composite decking made from recycled materials
- Edible landscaping including an orchard plot, a garden, and blackberries along the fence

These improvements were installed over a three-year period, culminating in the presentation of the Leadership in Energy and Environmental Design, or LEED, Gold certification from the U.S. Green Building Council on April 26th, 2013. This 150 year-old house became one of the most efficient buildings in the world and consequently, a point of pride for the Maryville College campus.

ION



FACTS

In the top 17% of LEED's 40,000 gold or platinum projects

One of 18 buildings in the state of TN to achieve LEED certification through renovation (not through new construction)

Oldest LEED Certified Building of 5 renovated projects

One of 59 Tennessee projects to achieve either Platinum (7) or Gold (52) certification

One of 3 college buildings in Tennessee with LEED Gold certification

Funding from the Margaret A. Cargill Foundation, the Appalachian Regional Commission, and Mountain Challenge, LLC







metz culinary



What is the first question every future college student asks when looking at a perspective school - How much does it cost? But what's the second - How's the food? At Maryville College the answer to this question is good news for everyone, even the environment. Replacing the previous food service company on campus in the summer of 2014, the Metz dining experience is as unique as the new and improved interior of our Pearson's Dining Hall. Maryville College is lucky, as our campus is the only Metz location in Tennessee. A small, family-oriented company, Metz is committed not only to nutrition, but also to sustainability in business.

They offer vegetarian, vegan, and specialty diet choices as well as all-natural ingredients, trans-fat free oil, hormone-free milk, cage-free eggs, and fair-trade coffee. Their ingredients and vendors vary greatly between locations as Metz kitchens everywhere seek to reach out into their communities to use the freshest local fare. Already, the Maryville College Metz has made connections in the area with Pop Culture, a whole food ice pop company based in Knoxville, TN, that uses local ingredients in each frozen confection. Pearson's Dining Hall has also cultivated a special relationship with Ecorich Tilapia Farms, another Tennessee local, who sells their uniquely raised fish to the school.





y service

5

SERVICE

In addition to their local connections, Metz is known for encouraging sustainable practices in their kitchens, promoting energy and water conservation, recycling, and waste reduction. In fact, the napkins in Maryville's dining rooms are made from recycled paper, and steps are taken to reduce used cooking oil waste. James Dulin, the manager of the Maryville College Metz operation, has already taken steps to increase student involvement in not just the food service but also the sustainability practices on campus. Students have the opportunity to submit their ideas for dishes to the culinary staff at the college, and so far, many of the suggestions have come to fruition, including almond milk, bread pudding, lactose-free ice cream, gluten-free desserts, and even a pancake bar. In addition, near the end of the fall semester, Metz launched the SMART Plate Taste Initiative as part of their sustainable commitment to service. By rewarding practices like cleaning your plate and sampling new food before taking a full serving, Metz helps students substantially reduce food waste on campus.



Metz's dedication to happy and healthy service is shown not only through their corporate policies, but even more through their employees. At Maryville College, James Dulin leads his staff by encouraging family values to benefit the lives of the students. "We are an extension of the care-taking mechanism of Maryville College," says Dulin, discussing the importance of a campus feeling like a home. With all of the new advancements in the food service in their first year, Metz culinary service is sure to make eating at Maryville a delicious, comforting, and sustainable experience.



SUSTAINABIL



metz culinary service

ILITY



campus recycling program

One of the most basic environmental efforts a person or group can participate in is recycling. Sorting out our paper from plastic takes minimal effort and can reduce the amount of waste dumped in landfills by literally thousands of tons. And on Maryville College's campus, recycling is made as easy as possible so that students can take every opportunity to contribute to the sustainability of their campus.

6



ROCK TENN

cling



In the fall of 2012, a deal was struck between the college and the Rock Tenn Recycling Company. In addition to their sustainable consumer and corrugated packaging operations, Rock Tenn is one of the world's largest recycling companies, recovering, processing, and selling over eight million tons of recycled material every year. The company agreed to come pick up discarded materials from the large recycling bins outside of every campus building for free, but on a few conditions:



1. The arrangement must remain profitable for the company, meaning that the college had to reach a certain amount of recycled materials every pick-up.

2. The quality of the recycled materials must be good. This means that the amount of non-recyclable materials, like food or grease stained products, must be kept at a minimum of 5% contamination.



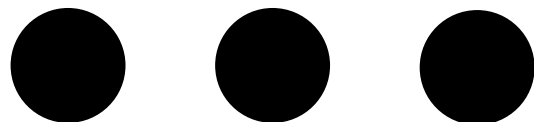
This arrangement is one of the simplest ways that Maryville College has been able to reduce its carbon footprint over the past three years. In 2014, the college recycled over forty tons of materials, which otherwise would have ended up in a landfill, and over time, they have been able to keep their contamination percentage down between three and four percent. The process is more than easy, too, as no sorting of materials is required for the students. Rock Tenn's single-stream system ensures that as long as it's recyclable, it will reach the correct processing facility.

The program grabbed the attention of students in the Maryville College Student Government Association only a couple years after its inception. In the Spring of 2014, the Campus Life Committee of SGA created a program for students to check out small recycling bins for their dorm rooms. "We started the recycling program so that we could better promote recycling on campus," says sophomore senator and new Campus Life co-chair Ryan Indelicato.

"We thought that if students had a personal bin specifically for recycling, it would influence them to do so."



campus recycling pro



40 tons



RESULT

ogram

Sustain-a-Scot
recycling program

The program began at the Opportunities of a Lifetime fair in the Fall of 2014, a club fair meant to kick off the new school year. To date, approximately 122 recycling bins have been checked out. All students have to do is take their bags of recycling out with their garbage, and put them in the large bins sitting outside each residence hall. Because of this effort by the SGA and Campus Life Committee, brimming recycling bins can be seen all over campus.

environment to education

At Maryville College, the Natural Science department isn't the only place you can go to learn about sustainability. The entire school is dedicated to teaching sustainable practices, finding ways to incorporate the principle into every department.

7

One particularly unique place to find sustainability education on campus is in the Design department of the Clayton Center for the Arts with Professor Adrienne Schwarte, Associate Professor of Design and Coordinator of the brand new Sustainability Studies Minor. Professor Schwarte is one of the leading faculty advocates for sustainability on campus. In her design courses, she strives to communicate the absolutely essential nature of sustainability. Schwarte is always asking her students, "What are some of the decisions you can make that can be more sustainable?" and she encourages them to ask others. From teaching her students about green certified printers, green inks, and paper waste, to helping them learn to communicate with clients about sustainable options and choosing digital services over printed, Professor Schwarte tackles sustainability from a completely unexpected angle.



Schwarte received her M.F.A. in Multimedia Design with an emphasis in Educational Psychology from the University of Minnesota. Schwarte's creative production and research interests are focused on social activism and environmental sustainability within graphic design, graphic design practices towards climate change mitigation within environmental organizations, geo-tourism principles and experiential travel-study abroad and non-for-profit design. Currently, she is a coordinator of the new Sustainability Minor at Maryville College. She also serves as the College Faculty Representative and Research Administrator for the Association for the Advancement of Sustainability in Higher Education (AASHE) and the Sustainability Tracking Assessment and Rating System (STARS).

Adrienne Schwarte

Associate Professor of Art and Design
B.A. Buena Vista University
M.F.A. University of Minnesota



Emily spends much of her time working as a Mountain Challenge staff member, creative writer, and responsibility manager. She loves to spread the word about Mountain Challenge’s sustainability practices, from getting LEED certified to helping set up the campus recycling program with Rock Tenn. Emily is a huge supporter of the idea of reciprocity when it comes to humans and the environment. When asked why she chose the Environmental Studies major, she replied, “Environmental studies was a perfect fit for me because it allowed me to take many different courses in a variety of disciplines, from natural sciences to humanities. It was great for me because it fulfilled my various interests and helped me gain a variety of skill sets. I also think it is reminiscent of how we need to think of issues related to the environment and sustainability in general—they’re multifaceted issues that require multifaceted approaches to solve.”

Emily Guillaume

Senior
Environmental Studies (B.A.)



MOUNTAIN CHALLENGE



Another unique educational opportunity, one that is only found at Maryville College, is the Mountain Challenge program. A business in and of itself, Mountain Challenge works on the MC campus, providing outdoor recreation opportunities for students in addition to their booming business of expeditions and teamwork building exercises. Almost every weekend, Mountain Challenge staff, many of whom are students, lead trips like hiking or flat water paddling. A student can exchange participation in five of these trip for one credit hour of physical education, an opportunity many leap at the chance to explore. To the folks at Mountain Challenge, sustainability isn't just energy conservation or recycling. It's having a connection with our environment that centers on reciprocity - putting some of yourself into your environment and getting something back in return - to promote physical as well as mental health.





PH



WILDLIFE PHOTOGRAPHY

Of course, students at Maryville College always have the option of learning about sustainability in a more traditional educational setting, like the Natural Science Departments. Located in Sutton Science Center, the professors in the natural sciences, particularly biology, work hard to instill an appreciation for nature in their students.



Another extraordinary opportunity for Maryville College students to find their own appreciation for nature comes around every year in January. January Term, or J-Term, is a three week period in January when students have the opportunity to relax and focus on just one class until the beginning of the spring semester. And so it's the perfect time for Dr. Drew Crain's Wildlife Photography Class. Using the College Woods as a training space, Biology Professor Dr. Crain teaches students how to use the school cameras to capture nature scenes (no filter required). After their education is complete, the class then heads out to the Great Smoky Mountains for what Crain calls "emersion in outdoor experiences." The photographs taken on these trips have received high praise from viewers on and off the college campus, and calendars featuring the students' work are sold in the campus bookstore.


** photographed in Dr. Drew Crain's Wildlife Photography Class*



Dr. O’Gorman has spent eighteen years teaching environmental public policy and environmental sustainability. With a decade of service as an academic sustainability officer, he is also a successful grant writer, including projects that funded environment, science & technology startup companies and for international environmental education initiatives with E.U. and U.S. government agencies. He is currently working on environmental education for Tennessee towns, watershed management programming in the southeastern U.S., and renewable energy development. O’Gorman believes that insuring a sustainable America should be a primary national security goal and takes pride in being able to teach the students of Maryville College about their role in the environment.

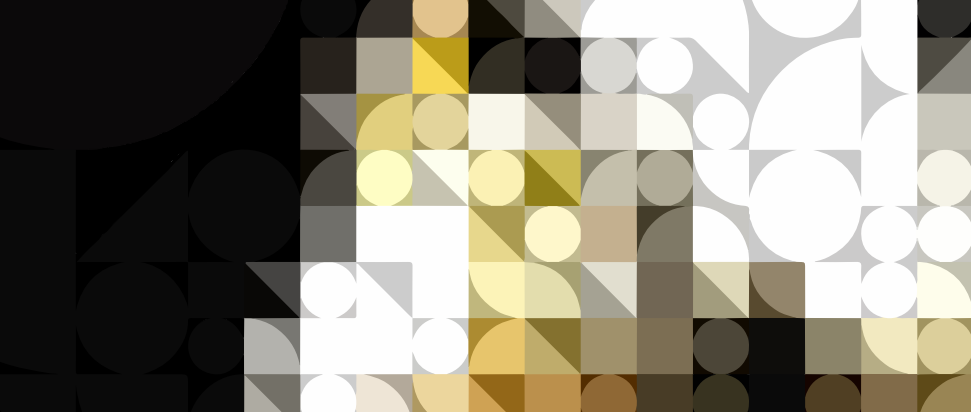
Associate Professor of Political Science
Coordinator of Environmental Studies Program
B.A. St. Lawrence University
M.A., Ph.D. Syracuse University - The Maxwell School of Citizenship and Public Affairs

Dr. Mark O’Gorman

A close-up photograph of a person's hands holding a small, dark-colored salamander with white spots. The person's hands are cupped together, and the salamander is resting on the palm. The background is a blurred, light-colored fabric, possibly a shirt. The overall tone is soft and focused on the small creature.

Another interesting program sponsored by the Biology department is the Jacksonville University Herpetology trip. Dr. David Unger, an associate biology professor at Maryville College, and his former colleague, Jacksonville's Dr. John Enz, work together to make these trips happen. Students from JU have the opportunity to come to Maryville College, which provides housing and meals for the visitors, and observe the rich biodiversity of the area, particularly focusing on the salamander population along with the MC vertebrate zoology class. And when there is sufficient interest in his ornithology class, Dr. Unger takes students from Maryville College down to Florida and observe different species of birds. This example of cooperative learning is just one of the ways Maryville College's dedication to sustainability rises above many of its peers.

Some students care about sustainability and the environment so much that they want to dedicate their lives to it. That's where the college's Environmental Studies and Environmental Science programs come in. While students will get a healthy dose of environmental education whatever major they're in, students in these two programs eat, breathe, and live sustainability. Students majoring in Environmental Studies are provided a comprehensive and expansive set of knowledge and tools to better understand the subjects of sustainability and conservation.



The requirements for the major range from chemistry and biology classes to upper-level political science courses. This variety helps students gain a wide understanding of how the environment works, why it's important, and what they can do to affect change. Over the past six years, the number of students declaring Environmental Studies as their major has grown exponentially. Department heads Dr. Mark O'Gorman and Dr. Susan Ambler try to instill in their students a respect for nature and attempt to give them every possible opportunity to gain hands on experience in their field.



The Environmental Science program is actually a concentration of the biology department, so students will get all of the basics of biology while focusing on its more ecologically significant aspects. This concentration is used as a path for students interested in jobs in field biology, like wildlife biology and field zoology. The department is hoping to pass an Environmental Science Minor to act as a sort of capstone for the Environmental Studies and Biology Majors, combining the language of environmental policy and politics with the intricacies of earth science. This minor, combined with the newly established Sustainability Studies and Outdoor Studies and Tourism minors provide phenomenal new opportunities for interested students to learn more in-depth about sustainability and the environment without having to commit their entire degree to it.





All of these unique educational opportunities prove that Maryville College is invested in sustainability, not only for the sake of the school, but also for its students. The professors dedicate themselves to ensuring students graduate with more than a healthy respect for nature. They also strive to leave students with a desire to spread the influence of sustainability to all whom they encounter in their future endeavors.



At Maryville College, study abroad is not only a fun and exciting educational opportunity - it's also one of the most popular programs available. A shining example of this is the spring 2014 trip to Bonaire in the former Netherlands Antilles. Last spring, Dr. Dave Unger, associate professor of biology, took a handful of eager MC students on a 9-day diving trip to Bonaire. The trip was part of a 4 credit hour vertebrate field biology course with a focus on conservation of the coral reefs and tropical ecology. "Bonaire is the only island in the world where the entire reef is a National Park," said Unger, "Other islands you can only go on private sections, but not on Bonaire. That's what's pretty cool about it."

One of the main focuses of the trip was clearly on conservational biology. Unger wanted students to be exposed to the ways in which we are impacting the world around us, and coral reefs have always been a huge indicator for this. "The students are exposed to the ecology of tropical fish, but they're also exposed to extinction on islands, pollution on islands, and possibly one of the most important things, exploitation on islands and also the conservation efforts on the island," said Unger.

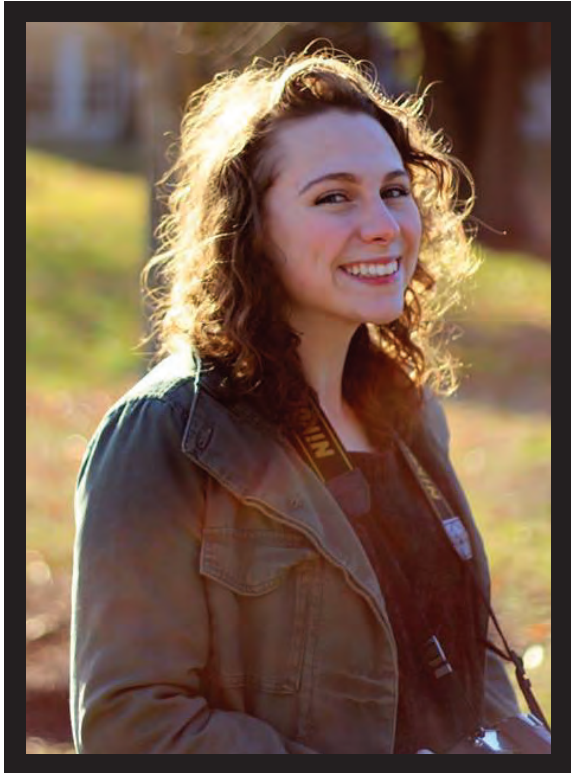


B



special features

ONNAIRE TRIP



Amelia is an active member of the Maryville College community, dedicating her time to her work at Mountain Challenge and her experiences as a Bradford Scholar and a Literacy Corps member. She has spent much of her time forming ideas to inspire other students and spread her passion through the development of a Mountain Challenge Girls program for freshman women, as well as helping to reestablish the Maryville College chapter of Tri-Beta, a national honors society for students in the biological sciences. During her time at Maryville, Amelia has had the opportunity to explore various aspects of Environmental Science and has been able to further her learning experience by studying abroad in Ghana through the MC Sustainability Airfare Grant. When asked about her life goals, she replied, "Ultimately, I would like to dedicate my career to scientific discovery, education, and the improvement of environmental conservation and human health."

special fe

Amelia Brumbaugh

Junior
Biology (B.S.)
Environmental Studies (B.A.)



atures



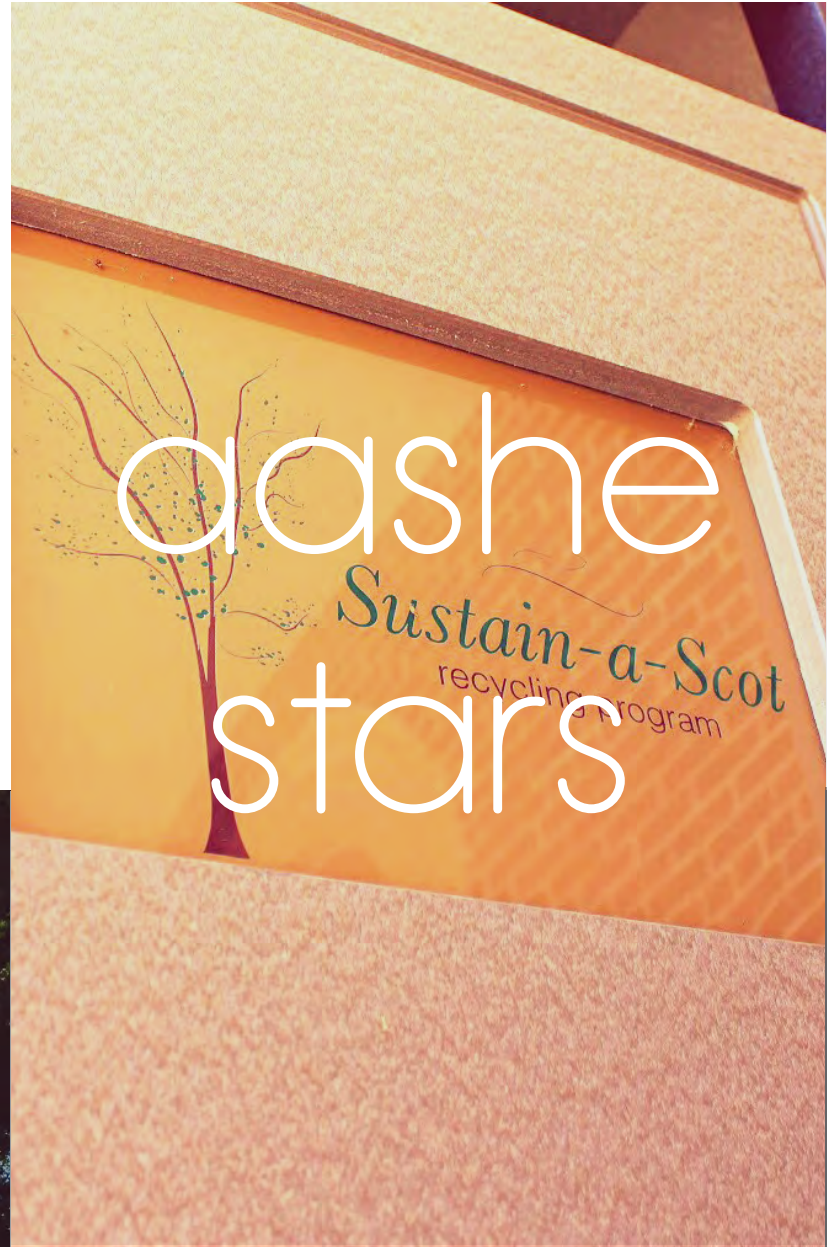
Besides assisting in routine natural habitat cleanup, the MC students also spent part of their time at Bonaire picking up plastics and trash from the marine habitats around the island, studying fish diversity and coral reef health, and even examining non-marine vertebrates like the Bonaire whiptail, a species of lizard native to the island.

Multiple senior studies were conducted around research done during the trip, and the entire group was given an opportunity to examine tropical ecology and sustainability in a way they will not soon forget.

BONAIRE TRIP

In the center of campus, right outside of Pearson's dining hall is one of the most popular hangout spots on campus- the solar docks. Thanks to the Margaret A. Cargill fund and the Appalachian Regional Commission, the college was able to purchase two solar dock tables in 2010. These tables are one of the best known green features on campus and have piqued the interest of many students. The "umbrella" at the top of the dock not only provides shade during the day and LED light at night, but it also contains five solar panels to capture the sun's rays. This solar energy is then stored at the bottom of the dock and used to power the lights and the outlets where students can charge the phones, laptops, and anything else that could use a quick boost of power.

Provided by Enerfusion Inc.



solar dock tables

Maryville College is currently an institutional member of the Association for the Advancement of Sustainability in Higher Education (AASHE) and a Charter Participant in the Sustainability Tracking Assessment and Rating System (STARS). In 2012 the college received a Bronze rating for sustainability on campus through efforts to reduce energy consumption, waste, and water use among many other things. Maryville College is currently working on the 2.0 report of AASHE STARS, to submit for another rating in winter 2016.

Previously named the MC Environmental Club, the Environmental Action Team, or E.A.T., has been a recognized student organization on campus since 2003. Over the years, the club has sponsored activities like retreats at Narrow Ridge Earth Literacy Center, clean-ups with Keep Blount Beautiful and Little River Watershed Association, and a multitude of events during April's Earth Week. In August of 2010, students collected copious amounts of cardboard from move-in day on campus and used it to create a "box fort" to help promote campus recycling. In 2015, the club sponsored a few events including a showing of the popular environmental documentary "A Fierce Green Fire: The Battle for a Living Planet", a seed starter kit fundraiser, and a recycling project in the newly renovated Anderson Hall.

yoga deck

E.A.T.

The yoga deck was built in the summer of 2014 and is made from recycled Coke bottles, much like the front porch of Crawford House. Its purpose is to be used as a means of getting more people active outside by being able to host different fitness classes like yoga, Pilates, and even boot camps there. The deck is also a symbol of the idea of sustainability as integrating reciprocity and the connection between humans and environmental health. At Mountain Challenge, a big part of sustainability is the human component -- keeping people mentally and physically healthy. Research is beginning to show just how much benefit there is exercising outside and how positively being out in nature affects us. Mountain Challenge partner Emily Guillaume describes it by saying, "So basically it serves a model for the next phase of sustainability -- integrating the human well-being aspect of sustainability with the environmental aspects."



The Environmental Initiatives Office (or EIO) was started with a simple purpose: to tell the story of sustainability at MC. Despite all its innovations and green-minded methods, little was being done to show off or use the work happening right here on campus.

“We simply don’t talk about it,” said Bruce Guillaume, head of the Mountain Challenge program and lead sponsor of the EIO. “Maryville College is really good at promoting sustainability but really bad at organizing and utilizing our work.”

To answer this dilemma, Guillaume, in cooperation with Dr. Siopsis, Associate Professor of Mathematics and head of the Scots Science Scholars program, applied last year for the Gerald W. Gibson Professional Development Fund grant in order to establish the EIO. By collecting and organizing data on sustainability at the college, creating spreadsheets that detail energy expenditures and environmental impacts, and putting all that information into an exciting and easily understandable form, the EIO hopes to share all the amazing things being done here at MC and keep pushing the college toward a greener, more sustainable future.

“More than anything else, I want it to be cool.” Guillaume said. “I want it to be something that the Admissions Office sees and says ‘We have to show this to students.’”

“This new project that we’re starting over in the Environmental Initiatives Office is exciting for a lot of reasons,” said Hannah Kirby, the freshman environmental studies major who will be heading the green side of the initiative.

“We’re basically putting together a comprehensive summary of the environmentalism efforts here on campus, along with pictures and quotes from students, and turning it into a recruiting tool for the college.”

Kirby, who had initially considered other green-forward schools such as Warren Wilson College in North Carolina, came to Maryville for its sustainability initiatives but admits they were not easy to find. For all the wonderful work MC does in environmental awareness, most of the story is as of yet untold. Kirby, Guillaume and the EIO hope to change this.

“Hopefully, prospective students will be as excited as I am about going green at MC, and current students will gain more awareness about what’s going on here on campus and what they can do to help,” Kirby said, “It’s really amazing in a lot of ways. The work the Environmental Initiatives Office is doing at Maryville could bring about some real, substantial change.”



about us

authors Hannah Kirby
Chase Condron

designer Minh Hoàng

photo sources Office of Marketing & Communication
Minh Hoàng

research analyst Andrew Godfrey

research supervisor Bruce Guillaume

design supervisor Adrienne Schwarte

Special Thanks to the Students, Faculty, and Staff of Maryville College

Thank you!



MC MARYVILLE COLLEGE

502 E. Lamar Alexander Pkwy
Maryville, Tennessee 37804

maryvillecollege.edu

