### 1984 meets 1994

at ESF in the High School Event

by Maura Stefl ESF Office of Outreach



HE '80S MET the '90S at a September campus visit by "ESF in the High School" partner schools Hannibal High School and East Syracuse-Minoa High School.

Bill Mason (left), a 1984 Forest Biology major, brought his dual enrollment Global Environment class to campus as part of the program. Bill has been teaching "ESF in the High School" for 5 years. He has four sons and he hopes that his second oldest, who is a senior at Hannibal, will attend ESF next year. Bill is originally from Hannibal.

John Herrington (right), a 1994 Environmental and Forest Biology major, teaches at East Syracuse-Minoa High School and has been an ESF adjunct since 2007. He enjoys teaching Global Environment as it is a great way to stay connected to ESF, has a fantastic curriculum, and makes a difference in the lives of young adults. John also teaches in the district that he himself attended, and lives in Pompey, NY. Incidentally, his wife, Pam Herrington '97, is also an alumnus and co-teaches with him. \*

# ESF Student Club: The Bob Marshall Club

ESF students are a remarkably active and well-rounded group! In addition to their academic studies, a great number of students are also involved with various clubs and campus organizations. Beginning with this issue of the *Alumni News*, we will be highlighting specific organizations to give you a glimpse into what keeps ESF students actively engaged on campus!

Profile compiled by Robert Coady

**Club name and year founded:** The Bob Marshall Club was founded in 1973.

How many members are there currently? 30–40 devoted members, but over 80 different people have been on a trip in the last year.

History of the Club: The club was co-founded by Dr. Robin Kimmerer '75 during her undergraduate career at ESF. She sought to emulate the values of Bob Marshall himself, after developing a connection to the family, and wanted to preserve Bob's memory for years to come.

Club's Mission: The mission of the Bob Marshall Club is to provide outdoor hiking and backpacking opportunities to ESF students. Both on and outside of our trips, we emphasize the principles of Leave No Trace, and stewardship of the environment. Emulating the values of Bob Matshall himself, the BMC never gives up an opportunity to give back to the environment, and to pass on the knowledge needed to appreciate and preserve the outdoors to the best of one's abilities.

**Key Activities:** The Bob Marshall Club organizes multiple overnight

backpacking and day hiking trips each semester. While we're always looking for new places to explore as a club, most of our backpacking trips take place in the Adirondack re gion, and our day trips are scattered around New York. Every year, we organize a trip to the Adirondacks for Fall Trails Day, a backpacking trip where the club has the opportunity to preform trail maintenance while guided on various hikes up the high peaks. We also have an annual Finger Lakes backpacking trip, movie night, and potluck. Additionally, our officers hold educational workshops to educate aspiring backpackers about various principles surrounding safety and preparedness for future trips.

What is one interesting fact about the Club that people might not know? The BMC is one of the oldest clubs on campus!

Anything else our alumni should know about the Club? The club has grown substantially in activity and active member base over the past couple years. The officers are all proud of the work we've done to give the BMC a bigger presence in the school community, and are excited to see it continue to grow. \*



The Bob Marshall Club visits Taughannock Falls State Park in Trumansburg, NY.



Annual Finger Lakes trip, 2016



Annual trip to the Adirondacks for Fall Trails Day, 2016

# **Discovering What Scientific Research is All About**

### by Maura Stefl

ESF Office of Outreach

OMETIMES UNEXPECTED OPPOR-TUNTIES land in your lap, and unless you take them, you will never know what could have been. Madison Morley, a sophomore at ESF, is one of those people who followed up on an opportunity presented to her through ESF in the High School (ESFHS), and she found herself doing things well beyond what a typical first-year student does in her freshman year.

Madison's path to ESF began her junior year in high school. She knew she wanted to attend a college that would prepare her for veterinary school. In doing her online college searches, she looked at schools that offered biology and had reputations for being academically rigorous. ESF kept coming up at the top of her searches. Though she was a student at Paul V. Moore High School in Central Square, NY (only a half-hour from campus), Madison had never heard of ESF. After participating in an admissions tour, she left with a good vibeeveryone was so friendly, they kept stressing the rigors of classes, and the price was right.

While planning her course schedule for her senior year of high school, Madison noticed that an ESF course was being offered. She knew she wanted to go to ESF and she felt that getting some credits ahead of time would be a good move. The course was Global Environment (EFB120), taught by Tim Harrison, and, after taking it, Madison was of the opinion that it was "a great class." It in\*\* Keep your grades up. Take every opportunity. You will have a full plate, but it will pay off in the end. Freshman year is hard, but you need to take responsibility.\*\*

volved lots of field trips and a research project. She looks back now and says that this course "is ESF...the topics covered are what ESF is about." She was able to present her research project to her peers as part of ESF's Environmental Summit, held each year on the ESF campus. Knowing her future career choice would possibly include large animals, her research topic involved the reintroduction of wolves into the Rocky Mountain State Park. Most high school students never have the opportunity to present their research, or be evaluated by their peers.

Madison's research would continue beyond that project. As a student in the ESFHS program, she was offered a summer for-credit research internship working with ESF's Dr. Ruth Yanai in the MELNHE (Multiple Element Limitation in Northern Hardwood Ecosystems) lab on the ESF campus (www.esf.edu/mlenhe/). Under Dr. Yanai's supervision, high school students support the lab's efforts in a forest nutrient cycling project. The lab work includes leaf and root sorting, soil processing, building sap flow sensors and data entry. Madison actually earned three college credits for all of the hours she put into this project.

As part of the project with Dr. Yanai, students can also go on trips to the MELNHE research plots in New Hampshire, and Madison took advantage of that. On a trip that following fall, the

graduate students she travelled with noticed that some of the tree canopies were holding their leaves longer than those in the control group. Why was this happening? The group decided to explore this further and on subsequent visits, Madison continued to join them. Using the Snapchat app on their mobile phones, the group took pictures of the trees and marked the photos with the tree numbers. This novel approach, suggested by Madison, helped them to visually document what they were seeing.

A massive amount of data had been collected and an analysis needed to be done. Madison was encouraged to take this on. She had just started her freshman year at ESF, was taking hard and long General Biology and General Chemistry courses and had never taken a statistics course. With help and support from Dr. Yanai, former grad student Adam Wild '14 (who is now a professor at SUNY-Cobleskill), the grad students on the project, and a family friend, Madison was on her way to presenting a research poster at the SUNY Undergraduate Research Conference being held at SUNY-Cobleskill. She also showcased her work at the ESF Spotlight on Student Research and Outreach event on campus in April of 2016. She is being encouraged to publish the results.

When asked what advice she had for high school students and college freshman she responds, "Keep your grades



#### Madison Morley '19

up. Take every opportunity. You will have a full plate, but it will pay off in the end. Freshman year is hard, but you need to take responsibility." Madison's philosophy is that college is more than the end of high school; it is the start of your professional life.

Madison's plans are to complete a degree in Environmental Biology at ESF and possibly attend veterinary school. She also volunteers with the North Country Veterinary Services in Pulaski, NY, one of the few large animal vets in the area. Last spring, she assisted with the birth of a calf, another experience many college students wouldn't typically have a chance to be a part of.

The Environmental Summit for 2016 was held in June at ESF, and Madison was a keynote presenter to the current high school students taking Global Environment as part of ESF in the High School. Madison had good advice for those just a year younger than her, and looking back at her high school research paper, she can say that she now really knows what research is about, but probably would not have if she had not taken that first step. \*