



Laken Cooper '13 at the aviary

25 Years Student Research Blooms at Nature Conservancy

By Don Bowman

Throughout the year, students make the 20-minute drive to a 380-acre nature conservancy along the banks of the Little River to conduct original undergraduate research in the natural environment. Students from a variety of programs across campus take full advantage of this “outdoor laboratory.”

For 25 years, Selu Conservancy has been a unique academic resource that augments the rich variety of teaching and learning underway at Radford University.

As the main campus is transformed by modern facilities, the conservancy is also evolving into a versatile resource that supports a rich variety of projects from across disciplines.

For 15 weeks in the summer of 2014, senior biology major Matti Hamed performed a herpetofaunal survey of the property. While Hamed was focused on counting and

cataloguing the amphibian and reptile population living there, Selu’s value and beauty were constant presences.

“I was digging away, setting traps to monitor the site and regularly I stood up to enjoy the sun shining through the trees and bask in the exquisite beauty,” she said. “Being able to work at Selu daily deepened my appreciation of it as a habitat and ecosystem, and as a place.”

With faculty mentor Assistant Biology Professor Matt Close, Hamed, who wants to be a teacher, established a sampling method for determining the species diversity of local amphibians and reptiles that inhabit the Selu Conservancy and make it and the region special. She also organized an educational outreach workshop to teach the public about the importance of maintaining the diversity of amphibians and reptile life as well as how to find and



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identify them. Toward that goal, Close and Hamed also organized the Selu Reptile and Amphibian Workshop and Survey in conjunction with the Virginia Herpetological Society that brought additional volunteer help to assess one aspect of Selu's health and biodiversity.

AT HOMECOMING 2014, the university hosted a 25th Anniversary Celebration to honor the history and support the future of this unique academic resource. At this event President Penelope W. Kyle outlined the educational value of this natural resource.

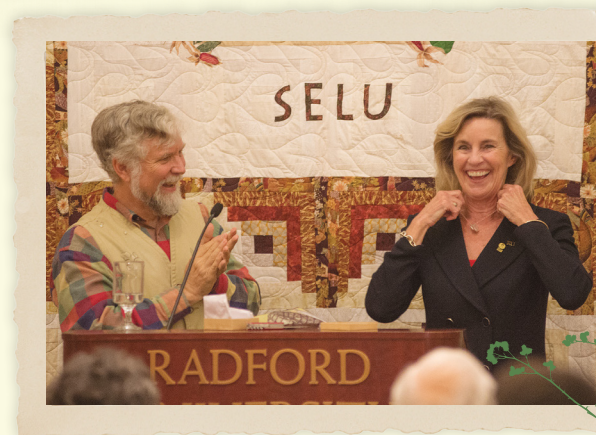
"There are many examples of outstanding undergraduate and graduate research happening at Selu. I need to stress this undergraduate research, in many cases, is graduate-caliber research. Because of this property, our students gain experience that makes them stand out from the rest when they apply for their first job or for graduate school."

President Kyle recounted the research assets that Selu provides: an aviary, a teaching and research reptile collection, an observatory and The Farm at Selu that gives visitors a glimpse of farming life in the 1930s through guided tours, interactive demonstrations and exhibits.

In the summer of 2014, Selu hosted a grassroots initiative – the formation of the Selu Garden and Service Club and its subsequent garden project. RU students and friends built,

planted seeds donated by the Virginia Master Gardeners, and harvested a 100-foot by 60-foot, 10-bed garden to generate produce for area fresh food pantries and club members. The Selu Garden and Service Club, begun in 2013, hopes to engage the student community in Selu Conservancy's future, said founding president Will Dowd, a senior geospatial major.

The club's effort at returning Selu to production culminated with a fall harvest festival. More than 100 pounds of Selu-



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John Bowles presents President Kyle with a necklace at the Selu 25th Anniversary Celebration.



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Selu 25th Anniversary Celebration

grown produce – corn, tomatoes, squash, zucchini, cucumber, green beans, eggplant, watermelon, cantaloupe, rosemary, thyme, sage and lavender – were donated to the Radford-Fairlawn Daily Bread and the Meals-On-Wheels program.

"Radford is fortunate to have this resource convenient to our classrooms to make research and learning come together. Selu is a treasure for both teacher and learner," said Close.

RU uses the conservancy to reach beyond its own campus and engage the community. To share the region's unique culture, volunteers and friends of the Appalachian Studies program interpret farm and home life for students in the region and community residents. Volunteers conduct tours to several stations in and outside the farmhouse. Visitors "hear," as well as see, what life was like for a typical 1930s family, thanks to volunteers who helped restore an antique radio and produce a CD featuring music, commercials and speeches of that era.

IN THE SPRING, more than 30 guests joined the RU student chapter of The Wildlife Society (RUTWS) at

Selu for its annual Bioblitz to highlight the region's native animal populations.

The university utilizes Selu across disciplines among many colleges. As a relatively unspoiled habitat or ecosystem, ongoing assessments by undergraduate researchers from the biology and geospatial science departments take place on the health and behavior of birds and Selu's tree and plant inventories. From the observatory, physics students use the light pollution-free night skies to monitor the heavens. Students in the Recreation, Parks and Tourism department use the grounds as a way to learn and then teach outdoor survival and team building. Nutrition students use the conservancy to study organic and natural food production.

Selu's versatility is highlighted by its use as a site where New River Valley emergency responders volunteer their time to train senior nursing students. RU nursing students have also completed projects about the history of healthcare during the 1930s. Their interpretation about the era's primitive health care is displayed at the Farm as are typical home remedies and plants from the Selu property that were used to keep residents healthy.

Before the Radford Amazonian Research Expedition takes off this summer for its three-week laboratory experience in the high mountain jungles, the team will use Selu as its training ground for sharpening their scientific research and outdoor survival skills and team building.

As the conservancy comes of age, many are dedicated to the future of this outdoor laboratory and classroom. A five-year

"The brick and mortar is in place now and the challenge is to develop the academic programs that will make Selu a living classroom for the university."

Jeff Armistead



Courtesy photo



Jaslyn Gilbert

Clockwise from top left: Selu Farmhouse; Elementary school students from Montgomery County visit the farmhouse; Kristy Galloway '14 participates in a controlled burn; Student and faculty volunteers prepare garden beds.

initiative is underway to increase the conservancy's current endowment to \$3 million and make Selu self-sufficient. The property was a gift to RU from John Bowles who in 1989 donated 185 acres of his ancestral land to RU. Named for the mythical Cherokee grandmother corn spirit by poet Marilou Awiatka, the property was expanded with a subsequent gift from the family to its present acreage.

"The brick and mortar is in place now and the challenge is to develop the academic programs that will make Selu a living classroom for the university," said Jeff Armistead, the conservancy's director for 18 years. Armistead, along with former Vice President of Academic Affairs and Professor of Biology Dave Moore, has been instrumental in positioning Selu for the next stage of its development.

THE SELU INFRASTRUCTURE includes The Farm at Selu Conservancy, which features a representative farmhouse as well as original and restored outbuildings used by a family of that era. A retreat center features a wraparound porch with views of the surrounding Blue Ridge Mountains and multiple meeting rooms for campus and community meetings and conferences. The Barn is a multi-functional building that serves as both a conference/event center and an educational building. The exterior of the facility replicates vintage

agricultural appearance and conforms to the Selu property's period look. The Barn is attached to the Selu Observatory. Selu also has a boat landing on the Little River, canoe livery and ropes course that can be reserved for private and university groups.

Whether it is researching habitat or human health, scientific exploration or historical interpretation, Selu Conservancy is a jewel reflecting RU's many facets.

"To me Selu has been invaluable," said Hamed. "It has provided me a place to explore my interests and deepen a personal avenue of discovery." ■

Continue the legacy of high-caliber hands-on undergraduate research and scholarship

at Selu Conservancy by contributing to the Selu Endowment Fund to help sustain, enhance and improve the conservancy for future generations. To give online, visit giveto.radford.edu, click on Give Today and designate your gift to the Selu Endowment Fund. You will make a difference for our students and this incredible resource!