From the Dean’s Desk

February 11, 2009

CSAT Alumni Activities Postponed Until October

The College of Science and Technology’s Alumni Advisory Council, Alumni Career Panel and the Pre-Med Panel are rescheduled due to the winter storm that struck the area Feb. 5.

The alumni events are now scheduled for the Friday of the Highlanders Festival in October.

RU Chapter of The Wildlife Society Nationally Recognized

In December 2009, the Radford University chapter of The Wildlife Society became a nationally-recognized chapter – only the second such student chapter in the state of Virginia. The group continues to build its member base and actively collaborates with the wildlife professional community. In the past 18 months, RUTWS has been involved in captive bear physiological sampling at Virginia Tech, tree plantings in Bisset Park, Bioblitz at RU’s Selu Conservancy and the City of Radford’s Vulture Day festivities. Also, the group hosted guest speakers from the University of Maryland and the Virginia Department of Game and Inland Fisheries. The club will continue to provide educational programs for students at RU, as well as field trips and field research opportunities for those interested in wildlife biology.

This week, seven members of the RU Wildlife Society attended the Virginia state chapter of The Wildlife Society. Student members Dwight Meikle and Craig Bland presented their research at the meeting, and their travel was supported by the Honors Academy. Biology faculty member Karen Francl also presented her research at the meeting. Her professional travel was supported by the Artis Centennial Early Career Development Program.

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The RU Wildlife Society participates in activities related to wildlife professions.
The ... grant makes it possible for us to undertake the work on ectoparasites and their affect on nestling and adult bluebirds, and keep it going for at least two field seasons. We are very appreciative that they are so supportive of this project”- Judy Guinan, Assistant Professor of Biology

Judy Guinan and Jason Davis Receive Grant

Biology faculty members Judith Guinan and Jason Davis received a $1,300 research grant from the New York Bluebird Society and the North American Bluebird Society. Guinan, Davis and four of their students will study the correlation between the presence of blowfly parasites and the stress levels in both adult and nestling bluebirds. Davis is an ecophysiologist and Guinan is a behavioral ecologist. Over a period of two years, they will be observing about 30 nests. By tagging each bluebird with a color-coded leg band, they will be able to track the movement of each bird. Blood samples from nestlings taken at one and 10 days of age will help to identify the presence of parasites, while samples taken from parent bluebirds at the same time will hopefully reveal if stress levels increase proportionally with offspring’s parasites. The analysis of the blood samples will be done in Davis' lab under his mentorship. Guinan will oversee the collection of the behavioral data in the field. Both will be working with students in the field, and on the analysis of the nesting material for the ectoparasites. “Dr. Davis and I are excited about the opportunities that this project will provide for student research,” says Guinan. “The New York Bluebird Society grant makes it possible for us to undertake the work on ectoparasites and their affect on nestling and adult bluebirds, and keep it going for at least two field seasons. We are very appreciative that they are so supportive of this project,” adds Guinan. Guinan will present research about Eastern bluebirds tonight at 5:30 p.m. in Reed Hall, room 326.

Rhett Herman Published in American Journal of Physics

Physics professor Rhett Herman paper titled “Spreadsheet physics: Examples in meteorology and planetary science” was published in the December 2009 issue of American Journal of Physics. This paper “describes the use of Excel to solve equations necessary to get a real understanding of two things. One is how planets are constructed, while the other is a relatively simple but very descriptive model of the heat balance of our planet,” says Herman. He adds that this is an exact model of various aspects of our climate, and could be used to understand how small changes in our atmosphere can lead to actual temperature change.

MES Hosted Distinguished Lecturer

On Tuesday, February 2, Paul Marinos of National Technical University of Athens presented to Radford University students a case of urban geology of land use, construction of major engineering structures, hazard assessment and sustainable development in Athens, Greece. Marinos is a past president of the International Association of Engineering Geology and the Environment (IAEG), immediate past president of the Geological Society of Greece and honorary member of the International Association of Hydrogeologists (IAH). Also, Marinos has been honored with awards such as the Hans Cloos Medal of IAEG and the Andre Dumont Medal of the Geological Society of Belgium. Currently, Marinos and his team conduct research on a variety of applications of geology to engineering. The main applications deal with rock mass characterization, weak rock properties and behavior, with special emphasis to tunnel design. His work also covers landslides, dam geology, and engineering in karstic terrain. His other significant interest is the protection of historic monuments and archeological sites.

For information about upcoming talks sponsored by the Museum of the Earth Sciences, visit www.radford.edu/mes.
Science Alliance “Science Days” Initiative Breaks Record  Ross Gillette ’10

In 2009, RU’s Science Alliance “Science Days” welcomed more than 1,200 pre-K through high school students and their teachers. Science Alliance, consists of a group of CSAT science faculty members whose concern for the lack of science and math literacy in the United States prompted them to create this program. Currently, the Science Alliance hosts about six school groups a semester with each group consisting of 100-130 students. The goal of the initiative is to resurrect interest in quantitative sciences like physics and chemistry, to demonstrate the excitement Radford’s professors have for the sciences, and hopefully fan such excitement in students.

CSAT faculty members including Jack Brockway, Brett Taylor, Kim Lane, Libby Watts, Diane Clark, Steve Lenhart, Darrel White, Rhett Herman and Bob Sheehy lead students in activities in their respective fields. Students participate in chemistry and physics activities, visit the RU Planetarium, receive a tour of the RU Greenhouse and The Museum of the Earth Sciences, and learn about wildlife from Sheehy and his vulture Buttercup.

RU Planetarium Has Record Year

In 2009, the Radford University Planetarium enjoyed another record breaking year for attendance. More than 3,000 visitors enjoyed planetarium shows throughout the year. This number includes Science Alliance “Science Days” participants and audiences for the Tuesday and Thursday evening and Saturday morning shows during the spring and fall semesters. Planetarium offerings include children’s shows such as Dinosaur Prophecy, Earth’s Wild Ride and Microcosm, in addition to shows such as Explorers, Images from the Infinite and MarsQuest. All shows are free and open to the public. For more information about the RU Planetarium and its offerings, visit http://planetarium.radford.edu/.
CSAT STEM Club Spotlight:
Activities and Upcoming Events

Thursday, February 11, at 5:30 p.m. in Reed 326, The CSAT STEM Club will host Dr. Judy Guinan, who will be giving a talk about her research with Eastern bluebirds. Come see what kinds of exciting research you could get involved in as an undergraduate student!

The club will participate in the Spring Semester Mini-Club Fair on Friday, February 12, from 2:30-5:30 p.m. in the Peters Hall Gym.

News from the Student Government Association
by SGA CSAT Senator Clarissa Clarke

This week, members of SGA are in Richmond for RU's annual Advocacy Trip. SGA members, other students representatives, faculty and administrators are meeting with members of Virginia’s General Assembly to advocate for Radford. On the agenda, the group will let assembly members know that we do not support the state’s proposal to take student fees we pay and use them as a source of revenue for the state’s budget. If the proposal goes through, it would almost certainly end up in increased tuition and fees for Radford students.

Have you been looking for a hands-on way to help those affected by the earthquake in Haiti? SGA has teamed up with other campus organizations to provide the RU community a chance to do just that. On Wednesday, February 24 from 8-10 p.m. please come out and help us package 40,000 meals for Stop Hunger Now, a relief organization that is currently in Haiti. The packaging event is in Muse Banquet Hall, and right now there is a Stop Hunger Now table in the Bonnie where you can donate 25 cents or more to pay for some of the packaged meals.

As always, all CSAT students are encouraged to contact to crclarke@radford.edu if there are any issues SGA needs to address.