

Spring 2010

The Log

An Alumni Association Publication
Warnell School of Forestry & Natural Resources
The University of Georgia



BALD EAGLES IN PERIL

Mysterious deaths
puzzling researchers

Bark Beetles invade Georgia • Distinguished Alums honored

SAVE THE DATE

APRIL 2010

- April 16-18 **Georgia Ornithological Society annual spring meeting,**
The Georgia Center
- April 23 **The Herpetological Society's 5th annual Day
on the Lawn,** in front of the Warnell School
- April 24 **UGA Baseball Game Alumni Get-together,**
1 p.m. lunch at Cali-N-Titos on Lumpkin Street before
heading to Foley Field. Contact Emily Nuckolls for
tickets and information, enuckolls@warnell.uga.edu
- April 24 **The Wildlife Society's annual Wildlife Supper,**
Flinchum's Phoenix; Social, 4-6 p.m.; Dinner, 6 p.m.
Admission \$8; children under 5 free. Tickets available at the
door. Contact Mike Cherry at cherrym@warnell.uga.edu
- April 28 **Athens Area Alumni Lunch,** Flinchum's Phoenix
BBQ lunch will be served. RSVP to Emily Nuckolls at
enuckolls@warnell.uga.edu

MAY

- May 8 **Spring Graduation Ceremonies,** Warnell, Building 2

OCTOBER

- Oct. 15 **Homecoming Festivities,** Athens.
Golf Tournament, 8:30 a.m. shotgun start
Alumni Association Meeting, 5:30 p.m.
Annual Alumni Dinner, 6:30 p.m., Flinchum's Phoenix
The day will also feature sporting clays and an alumni
school tour
- Oct. 16 **Homecoming Game Festivities,** Flinchum's Phoenix.
Game Day Brunch and BBQ, 9 a.m.–noon. Shuttle bus
will be provided for those attending the 1 p.m. UGA vs.
Vanderbilt game. Contact Emily Nuckolls at
enuckolls@warnell.uga.edu

MARCH 2011

- March 23-25 **Center for Forest Business' Timberland Investment
Conference,** Ritz-Carlton at Lake Oconee

CONTINUE YOUR EDUCATION *with Warnell*

- | | | | |
|-------------|---|------------|--|
| May 11-13 | Forestry for Non-Foresters,
Flinchum's Phoenix, Athens | Oct. 6-7 | Forest Roads in the Piedmont and Coastal
Plains, at Warnell |
| July 22 | Forests and Hurricanes: Impacts and
Planning Considerations, Warnell | July 20-21 | Master Timber Harvester Workshop, Tifton |
| Aug. 2-3 | Recreational Pond Management, Warnell | Nov. 9-10 | Master Timber Harvester Workshop, Forsyth |
| Aug. 10-11 | Wildlife Management, Location TBA | Nov. 10-11 | Estate Planning for Forest Landowners, Warnell |
| Sept. 21-22 | Deer Ecology and Management, Location TBA | Dec. 1-2 | Timber Income Tax, Warnell |

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WARNELL FACING CHALLENGING TIMES:

Economic troubles affecting higher education



The current economic climate continues to impact higher education as with other sectors of our economy. The University of Georgia, as with all parts of our state government, continues to reduce spending to meet our budget challenges. Thus far, Warnell has reduced our state spending more than \$1 million during this economic downturn. With additional cuts expected in the 2011 Fiscal Year budget currently under development by the Georgia Legislature, we are unsure at this time of the total impact of these higher education cuts. However, it is important to note that we have not been affected to the extent that many state agencies such as the Georgia Forestry Commission or the Department of Natural Resources. We continue to discuss the importance of our programs to Georgia and emphasize the impacts such reductions will have on forestry and natural resources across the state. Hence, if you have an opportunity to discuss with your legislators these cuts and the importance of higher education to Georgia please let them know if you so desire — it is important to our programs here at Warnell and higher education in general.

With the budget challenges we all face at the moment it is easy to look past all of the good things we have going on at Warnell. This year, our faculty brought in significantly more in outside funding (\$8.6 million) than we receive in state funding (\$7.5 million) thanks to the talented and dedicated faculty, staff and students here in Warnell. We are one of only two schools and colleges here at UGA that can make this claim, the other being the School of Public Health. Similarly, our teaching programs are in great shape with 350 undergraduates and 180 graduate students currently enrolled. Our faculty and staff do a great job of doing more with less in these challenging times.

A common question I receive these days concerns employment opportunities for our students. While not as strong as in years past, we continue to have good success placing many of our graduates even in these challenging times. I think this speaks to the quality of our programs and our students. Additionally, more students are pursuing graduate degrees in the current economic climate.

In closing, let me thank each of you — our alumni and supporters. One primary way we have been able to adjust to these economic times is through the judicious use of our endowment funds. Warnell has been around for more than 100 years and during that time we have built an endowment that allows us some additional flexibility relative to many programs around UGA and the South. These funds provide us with the ability to provide support for faculty, staff and students particularly in times like these. Support from these sources has continued to be strong — yet again establishing the quality of support we receive. Thanks to all of you who recognize the importance of such support in these challenging times.

Mike Clutter

Mike Clutter,
Dean, Warnell School of Forestry and Natural Resources



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Warnell researchers spotted an eagle afflicted with avian vacuolar myelinopathy near Lake Thurmond in Georgia just days before finding it dead. Photo by Rebecca Haynie

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HOW ARE WE DOING?

We welcome letters to the editor and feedback from our readers. Submit news items, questions or address changes to: thelog@warnell.uga.edu

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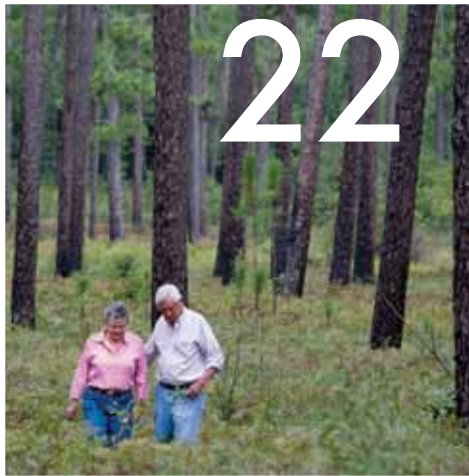
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Homecoming 2010



UGA vs Vanderbilt October 15 & 16

Come back to UGA for homecoming weekend enjoy all of the festivities:
Golf Tournament • Sporting Clays • Alumni School Tour
Annual Alumni Association Meeting • Alumni Dinner
Game Day Brunch at Whitehall • UGA vs Vanderbilt game

Contact Alumni Relations Office at (706) 542-0713 or enuckolls@warnell.uga.edu for information. Golf and Sporting Clays pre-registration due September 17, 2010.

Warnell shoots for conservation

Several Warnell students and faculty attended the three-day workshop earlier this year for wildlife and natural resource majors. The program is designed for those students who've never held a hunting license to give them a blend of classroom and field instruction on hunting, shooting and safety



PHOTO COURTESY OF TES RANDLE JOLLY



Warnell hosts high schoolers for Georgia Envirothon

PHOTOS BY ELIZABETH HAGIN



High school students competed in several categories in the Georgia Envirothon in March, hosted annually by Warnell at Flinchum's Phoenix. Regional winners go on to compete against other states.

Colloquium wraps up annual graduate symposium

Dr. Lindsay Boring (center) speaks with professors Bob Izlar and Todd Rasmussen following his Colloquium speech, which wrapped up the annual Warnell Graduate Student Symposium. Boring is the director of the Joseph W. Jones Ecological Research Center, overseeing its five long-term research projects and the stewardship of the 30,000-acre Ichauway site, graduate student co-sponsorship programs and the center's natural resource education and outreach services. The symposium is held every year for graduate students to hone their presentation skills and share their research in front of peers and judges.

PHOTO BY SANDI MARTIN



A Passion for peace: Growing number of Warnell grads signing up for Peace Corps



Kris Irwin calls it his ticket to the world. When the Warnell public service associate signed up for the Peace Corps in 1985, he saw it as his chance at exploration. And while the Peace Corps gave him that opportunity, Irwin says he quickly learned the value of an organization devoted to promoting peace by sending volunteers to live and work in developing countries. “Peace Corps is a valid career opportunity,” Irwin said. “It made me grow professionally and personally in ways that I did not think possible as a young person.”

Irwin hopes others will see the same benefits that he realized as a young volunteer. Now the coordinator for the Warnell Masters International program, Irwin is trying to create awareness of the unique opportunity it offers: Linking a Master’s degree with overseas service. The Master’s International program is not new – it was created in 1987 – but more students than ever are taking advantage of it. UGA comes in 23rd on the Peace Corps’ annual national rankings of large volunteer-producing schools, with 45 undergraduate students and three graduate alumni currently serving as volunteers. Historically, 455 UGA alumni have served in the Peace Corps since 1961, making it the top all-time producer of Georgian volunteers in the organization. “The University of Georgia is now ranked as one of the most outstanding Peace Corps-producing undergraduate universities in the nation,” said David Leavitt-D’Agostino, public affairs specialist for the organization. “The enthusiasm on campus for international service is widespread among students from many schools, including forestry and agriculture.”

Irwin is hoping to capture that enthusiasm. At Warnell, students can connect their Master of Forest Resources and Master of Natural Resources degrees with Peace Corps service. Students who sign up get the chance to work overseas, applying theory to practice. Warnell first began offering the Master’s International program in 2009. Students enrolled in the MI degree program take a one-credit hour of directed study each semester with Irwin. Among other tasks, they are expected to begin the application process to become a Peace Corps volunteer. Jessica Harper Warren is the first to sign up. “Our school prepares you for Peace Corps service because it

requires the student to apply classroom knowledge in the field,” she said. “Also, the students here love hands-on outdoor experiences and are not afraid to live with fewer amenities.”

Warnell Ph.D. student April Conway learned to live without life’s little luxuries both when she volunteered for the Peace Corps in Niger and when she returned to Africa for her study of pygmy hippos at the remote Tiwai Island Research Station in Sierra Leone. Being a Peace Corps Volunteer helped prepare her for the rigors of grassroots research, said Conway, who has also made two personal trips to Africa. “I put myself out of my comfort zone and learned about my own resiliency and abilities,” Conway said. “I met amazing people and lived happily for two years in a foreign culture. People in Niger are strong. They taught me that you don’t need electricity and indoor plumbing to function and be happy, and that sitting around chatting and drinking tea with friends is more entertaining than television or video games.”

Ph.D. student April Conway volunteered for the Peace Corps in Niger, living with the natives for 27 months (photos, top left, middle right and bottom right). Warnell public service associate Kris Irwin (photo, top right) credits his service in the organization with giving him a new perspective on working and living.

The Peace Corps is looking for undergraduates to fill assignments in scarce skill areas where it is difficult to find qualified applicants, including agriculture, forestry, environmental education, fisheries and wildlife management. For more information, contact Lisa Woodruff, UGA’s Peace Corps recruiter, at peacecorp-suga@gmail.com or (706) 425-2966.

NASA bringing bird’s eye view of climate change

NASA’s focus isn’t just on space. And Warnell undergraduate students will reap the benefits from a unique opportunity: a year-long combination of classroom and field classes studying the effects of climate change on birds. The space exploration agency is giving the Warnell School and the Franklin College of Arts and Sciences \$447,000 to pay for fall, spring and summer courses to teach students about global climate change models, research methods and designing field experiments. The final course in the lecture and lab series – slated to begin in Fall 2010 – will have students perform their experiments in the field, making them more competitive for graduate schools and jobs. Warnell Assistant Professor Jeffrey Hepinstall-Cymerman said the students will use NASA data, models, spatial analysis, statistics and field methods to study the effects of climate change on birds

through changes in spring green-up and insect abundance with respect to the timing of spring bird migration. .

Also included in the three-year education and research grant is Warnell professors Robert Cooper and Michael Conroy, and Marshall Shepherd in the Franklin College. The team will install ground sensors at Whitehall Forest and the Coweeta Long Term Ecological Research station so students can compare ground measurements of vegetation with those made using NASA satellites. Conroy notes that although climate change is often overlooked when the controversial subject is debated, warmer springs affects when the primary bird food source – insects – emerge. If birds don’t adjust to that change, he said, then newly-hatched birds won’t have enough food to survive.



SUBMITTED PHOTOS



Warnell staff honored at Homecoming

PHOTO BY SANDI MARTIN

Three Warnell staff members were recognized at the 2009 Homecoming dinner. Tripp Lowe, Malissa Russell and Tina Jones received the annual staff awards, presented by the Warnell Alumni Association. Jones will celebrate her 10th anniversary working at Warnell in August. She's currently an administrative specialist in Associate Dean Jim Sweeney's office, and credits her "life experience" for the glowing kudos she earns from colleagues. Lowe, who is known as the "GIS guy" around the school, is Warnell's scientific computing professional. A Warnell alum, he has a both a bachelor's and Master's degree, and is currently working on his Ph.D. He's worked at Warnell for 11 years. Russell came to Athens for school and never left. She has a bachelor's degree in biology, but has been part of Warnell's information technology team for 10 of her 20 years at UGA.



Pictured (L-R) Tripp Lowe, Malissa Russell, Dean Mike Clutter and Tina Jones.

Warnell seeking education partnership with Liberia



Associate Dean of Research Jim Sweeney traveled to post-war Liberia in February, following up on cooperation efforts with the University of Liberia for education, research and outreach. The African country's infrastructure, heavily damaged by war, poses a challenge for restoring education and research opportunities. Sweeney, along with Agriculture School Dean Scott Angle and Associate Dean of Extension Beverly Sparks, were hosted by the University of Liberia in Monroe, but they visited with Tubman University and Cuttington University faculty, along with government officials. While there, the UGA visitors helped define opportunities and priorities for research, student and faculty exchanges, and extension in agriculture, agroforestry, forestry, and wildlife and fisheries.



PHOTOS COURTESY OF JIM SWEENEY

Sweeney said a partnership with the schools there would also give Warnell faculty and students study abroad opportunities. One specific project that has already been identified is developing a management plan for the endangered pygmy hippopotamus, which has been the focus of Warnell studies in neighboring Sierra Leone, and which could provide an ecotourism opportunity for the poverty-stricken country. Liberia is home to the most significant remnant populations of the elusive hippo. Sweeney is optimistic that Warnell's research could expand into other areas.



FILE PHOTO

Karl Miller

Current position: Professor of Wildlife Ecology and Management, Warnell

Education: University of Georgia (PhD '85); Ohio State University (MS '81), Pennsylvania State University (BS '79)

Teaching: Management of Wildlife Habitats, Senior Project in Forest Resources Management, Fisheries and Wildlife Seminar

Personal: Married to Renee Miller; two sons – Shaun (16) and Tim (13)

Your research focuses extensively on deer, and you're known as the "Deer Doctor." What led you to this field and this animal in particular?

I come from a family of outdoorsmen, and some of my most treasured memories include the week at 'deer camp' with many of my relatives. When most of my friends were preoccupied with other activities, I was somewhere in the woods of northern Pennsylvania learning what nature could teach me. Naturally, when it came time to attend college, my passion for the outdoors led me to pursue the natural resources fields. In graduate school I pursued every work or volunteer opportunity I could find. By doing so, doors opened at the right time, and I've been blessed with the opportunity to pursue my passion of understanding this wild animal.

You're doing a DNR-funded study into how a coyote population increase in the East over the past decade is affecting deer populations, with some indications already that the predators are decreasing deer

5 Questions with Karl Miller

recruitment. What kind of potential impact will we see if this increase continues?

Over the past decade the population of this predator has exploded across the East. Coyotes appear to be having a significant impact on deer populations in some areas, primarily as predators of fawns during the spring and early summer. However, this predation has both negative and perhaps beneficial impacts. Reductions in deer populations may ultimately reduce hunting opportunities, and with that reduce an important source of revenue for many rural communities. On the other hand, coyote predation may help control deer populations in areas where sport hunting may not be feasible,

such as urban and suburban neighborhoods. However, urban/suburban coyotes can have other negative impacts, especially on pets.

Your research into deer vision has found that although their visual acuity is not as great as ours, they have tremendous ability to see movement and have far better night vision. What implications does this have for hunters and efforts to reduce the number of deer-vehicle collisions?

We've had several research projects that investigated deer vision, and we've determined that their vision is quite different than ours. Although deer do have the ability to see various colors, their somewhat reduced acuity and 3-dimensional perception makes it more difficult to identify stationary objects. But because of the distribution of the receptor cells on the deer's retina, they pick up movement very easily. This suggests that the color and camouflage patterns on hunting clothes are less important than minimizing movement. We are now exploring methods to exploit

the differences between deer and human vision to develop methods to reduce the incidence of deer vehicle collisions, although this research is still in its infancy.

With deer-vehicle collisions a constant worry, you and colleague Dr. Robert Warren have been studying different barriers that could help reduce such crashes. How close are we to finding an effective deterrent device?

We know that an 8-foot high fence is an effective deterrent to minimize deer vehicle collisions. However, we obviously cannot fence all of the roadways in Georgia. Barrier fencing likely will be just one of the tools that will have to be used to address this problem. Along certain sections of interstate highway, or in areas of high vehicular traffic or high deer densities, barriers will help with the problem. In other areas, tools such as increasing driver awareness, automated animal detection devices, alterations of roadside vegetation, and so on will be necessary.

Over your career, you've strived to understand deer ecology and how to best manage them for their environment. What insights do you have into troubles we may face in the future with deer populations across the U.S.?

Although deer populations are healthy and stable across most of the U.S., there are some significant challenges facing deer populations and management. Hunter numbers are slowly declining, and that trend is predicted to continue. Reduced hunter numbers could lead to reduced budgets for agencies that manage deer populations and perhaps to reducing the effectiveness of hunting as a way of controlling deer numbers. Deer-vehicle collisions, as well as agricultural damage from overabundant populations, continue to be major issues. Perhaps the most ominous cloud on the horizon is the spread of certain diseases like Chronic Wasting Disease.



PHOTO COURTESY OF PAUL GRATE

A silent killer is stalking America's bald eagle

CAN WARNELL CRACK THE CASE?

By SANDI MARTIN

The bald eagle is in danger. Even before America's most famous bird was taken off the endangered species list, a silent killer stalked it in the most innocent of places: the very food the bird of prey eats. Once attacked, the eagle suffers a neurological breakdown from holes in the brain and spinal cord. And so far, scientists don't know what the culprit is.

Dr. Susan Wilde has a suspect. While eagles are not the only victims of avian vacuolar myelinopathy (AVM), they have put a famous face on a disease that has been baffling researchers since it was first discovered 16 years ago. What they do know is that AVM is transmitted to eagles by the waterbirds they favor as food — coots. But where are the coots getting infected?

Wilde's suspect? Cyanobacteria coating the leaves of aquatic plants the waterbirds nibble on. The same plants, primarily invasive species such as hydrilla, elodea, and Eurasian watermilfoil, are found in hundreds of lakes across the Southeast. She has found this blue-green algae at every confirmed location of AVM, and first noticed it herself in 2001 when she worked for the South Carolina Department of Natural Resources. The Warnell associate professor strongly suspects that the cyanobacteria is producing the neurotoxin that is causing deadly brain lesions and neurological problems in infected waterfowl. Now she just has to conduct research trials to test this theory.

Susan Wilde collects hydrilla at Heads Creek Reservoir, Georgia.

Photo courtesy of Brent Hess/GA DNR



SILENT KILLER

AVM is not new — it was first discovered in Arkansas in 1994, when 29 eagles were found dead in two years. The eagle deaths spread — 26 mortalities followed in 1997, and the death toll has continued to rise over the past decade, spreading to mallards, ring-necked ducks, buffleheads, American wigeons, Canada geese, great horned owls and killdeer. As of 2009, researchers have 17 confirmed sites of AVM — and Georgia is leading the pack. From 2007 to 2009, 16 eagles have turned up dead from AVM. But those are just the ones we know about, Wilde says. The actual death total that can be attributed to AVM is likely much, much higher. Most of the dead birds are never found. The implications of this disease are clear to Wilde. “These inland reservoirs should be beautiful habitats for the eagles to nest and for stopovers during waterfowl migration,” says Wilde. “We don't want them to become deadly destinations.”

AVM is a particularly nasty neurological affliction: animals develop brain lesions that impair their motor skills, causing difficulty walking, swimming or flying — usually just days after exposure to the causative agent. Affected coots become especially vulnerable to predation by eagles, and affected eagles typically overshoot their perches or fly into things. In advanced stages, they appear blinded. Death follows, although miraculously, some affected animals have survived. Scientists have figured out that the birds are getting exposed to a neurotoxin — they just don't know exactly what it is or where it comes from. Or where it will show up next.

Has it always been here? What has changed in the past 16 years that brought it out? Wilde doesn't know for sure, but she notes that AVM is being documented solely in a zone across the Southeast, and AVM demonstrates a seasonal occurrence, killing birds in the winter. She wonders if there's something unique in the soil chemistry of this region that promotes this cyanobacteria, which is within the Stigonematales order. "It could be something very simple controlling where this occurs," she said. That's just one of many questions researchers are tackling.

TESTING THE HYPOTHESIS

When the eagles first started showing up dead in Arkansas, investigators thought that someone had dumped toxin in the water. Wilde, an aquatic ecologist, was doing reservoir surveys of the known AVM sites and assessing algae when she first saw it: Dark algae spots on the leaves of hydrilla. She was scouring Lake Thurmond near Augusta after AVM was discovered there when she had her "Eureka" moment: was this abundant unknown species of cyanobacteria growing on the leaves turning food into poison? Further study has borne a good working theory: Every confirmed site of AVM has also been confirmed to have invasive plants with the cyanobacteria coating. "Not every place with hydrilla has a problem," Wilde says. "But every place I've found that has hydrilla and the cyanobacteria has the disease."

Coming up with a likely suspect is one thing. Proving it is turning out to be a bit harder. Wilde and researchers across other states

have conducted several studies tracking how the disease is transmitted. They've found little risk of transmission to mammals, and it appears that it's transmitted once the stomach content of an affected animal is consumed. Wilde and her research assistants have spent hours collecting samples from Georgia lakes, taking slimy hydrilla to her Whitehall lab for analysis. Lake Thurmond has been found to have the highest algae concentration of the 17 confirmed AVM sites across the Southeast. Other experiments have included exposing certain animals prone to the disease, although Wilde is now using cell line bioassays to avoid using live subjects. But tracking down this disease is also proving to be difficult because of the way it behaves in the lab — once Wilde and her assistants have the algae growing in culture, it loses its toxicity. So she has to collect enough of it from the wild to conduct experiments. That's where Wilde's research stands — working to grow the AVM suspect cyanobacteria under the same conditions that it would experience in the fall in a reservoir and testing the culture for toxin production. Additionally, Wilde's lab continues to monitor lakes and reservoirs across the southeast for the presence of sick waterfowl or birds of prey, and invasive plants with the novel species of cyanobacteria.

UNEASY SOLUTIONS

Even if Wilde and her counterparts at other natural resource agencies positively identify what's producing this deadly neurotoxin, there's concern about how to control it. They've linked it to the invasive plants, especially hydrilla, Wilde says, so solutions



Susan Wilde inspects hydrilla for the presence of AVM-suspect cyanobacteria on the underside of the leaves.

FILE PHOTO

have focused on removing the tainted food supply. Hydrilla is an easy food source for coots, but fishermen like it because it provides structure and cover in lakes. So any attempt to rid afflicted lakes could be met with opposition. But one idea revolves around just that – populating infected lakes with sterile, grass-eating carp that would eat the hydrilla, and possibly take care of the AVM problem. It's already been successfully tried out elsewhere — Lake Murray in South Carolina, received 64,000 carp in June 2003. In two years, the carp had eaten an estimated 3,880 acres of invasive hydrilla and removed the threat of AVM.

“We are anxious to learn the secrets of AVM so we can respond with an appropriate management strategy” said Jim Ozier, a program manager with Georgia Department of Natural Resources’ Nongame Conservation Section. “So far the impacts have been significant on a few local populations of a few species of wildlife. But if AVM were to spread unchecked to more species and more locations, it could be devastating.”

Wilde’s research at Warnell could ultimately shape any future mitigating policies, whatever they may be. “Although the cause of AVM is not entirely understood, the disease poses an undeniable threat to the health of waterfowl and predatory bird, namely bald eagle, populations in the Southeast, Wilde says. “Continued research, monitoring, and management actions will be necessary to better understand AVM disease and protect vulnerable species.”

Researchers have confirmed the presence of AVM in multiple sites across the Southeast. Below, Warnell graduate student James Herrin has been culturing blue-green algae, including the novel Stigonematales species, in the fisheries lab at Whitehall Forest as part of Wilde’s research. These cultures will allow them to directly test the hypothesis that algae causes the AVM lesions.

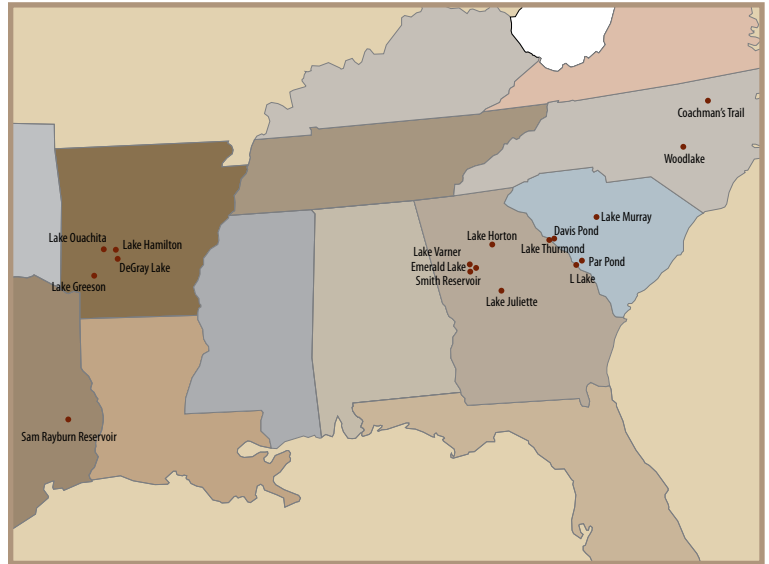


PHOTO BY SANDI MARTIN



The background of the entire page is a sunset or sunrise over a line of trees. The sky is a warm orange-brown color. In the foreground, the silhouettes of many trees are visible against the bright sky. Two bark beetles are featured: a large one on the right and a smaller one on the left. Both have dark, textured backs and reddish-brown legs. The title 'ATTACK of the BARK BEETLES' is written in large, bold, brown letters with a white outline, centered over the image.

ATTACK of the BARK BEETLES

By SANDI MARTIN

Photo illustration by Elizabeth Hagin

GEORGIA IS BEING INVADED. The tiny invaders are exotic, destructive and fast breeders. And they're probably here to stay, feasting on native hardwoods and potentially causing serious economic damage to Georgia's timber industry. The intruder? Camphor shot borers, exotic woodboring ambrosia beetles that can kill living trees and bring a nasty fungus with them. "Our forests are being increasingly invaded by exotic species that may have the capability to cause ecological and economic damage. We need to be vigilant about such biotic invasions" says Kamal Gandhi, a Warnell assistant professor.

Gandhi joined the 2009 Cooperative Agricultural Pest Survey team that conducted the annual multi-agency insect sampling in Georgia, working with insect experts from the Georgia Forestry Commission, Georgia Department of Agriculture, UGA and the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (USDA-APHIS). Their 2009 sampling found that the beetles (*Xylosandrus mutilatus*) have made themselves at home in six Georgia counties — but they could be in other parts of the state by now, Gandhi said. The destructive beetle has already rooted itself across the Southeastern U.S., though. Researchers first found the beetle in 1999 in Mississippi, and since then, it has been found in Alabama, Florida, Louisiana and Texas.

And the 2009 Georgia sampling wasn't the first time they've been found here. Previous surveys just never found quite so many, Gandhi explained. The annual CAPS sampling — conducted every year to detect and monitor exotic pests that threaten Georgia's agriculture and environment — found three adult ambrosia beetles in 2007. But the 2009 survey found 56 of the destructive pests in the same six counties surveyed. "This is alarming because they're also bringing their exotic fungi, they are hard to detect and they can establish their populations quickly in a new area," Gandhi said.

A previous study has estimated that the beetles could be behind \$50 million in annual timber losses in some areas of North America, but Gandhi said it's not clear that the

exotic bugs have started killing Georgian trees — but they are certainly capable of doing just that. The camphor shot borers stow away in wood packaging around cargo, waste and soil from Asia, bringing with them an exotic pathogenic fungi that can also kill trees. They can attack more than 200 plant species and a wild variety of native trees, and eradicating the beetle is virtually impossible.

James Johnson, Gandhi's colleague at the GFC, notes that other states have reported minimal problems so far, and he expects Georgia to fare the same. "Some estimates indicate that one out of every hundred new species introduced may cause problems, and a small portion of these can cause catastrophic problems," he said. "It is often difficult or impossible to tell which species have the potential to cause the severe problems, but we have some history on this species from other southeastern states."



“OUR FORESTS ARE BEING INCREASINGLY INVADED... WE NEED TO BE VIGILANT ABOUT SUCH BIOTIC INVASIONS!”



Playing *with a* Theory

Rare wood used in violin bow-making
fascinates Warnell researcher

By LINDSAY WARD

Although he is not a musician, Dr. Laurence Schimleck is interested in the wood that is used to make high quality violin and other stringed instrument bows. The best bows are made from pernambuco (*Caesalpinia echinata*), a Brazilian species found in a band of forest that stretches along the Atlantic coast. The area where the tree grows is being rapidly developed and pernambuco is becoming increasingly rare. Interest exists in establishing pernambuco plantations in Brazil and in finding alternative species for bow manufacture, however, it is unclear what wood properties, or combination of wood properties makes pernambuco so valuable.

To help answer this question Dr. Schimleck visited Port Townsend, Washington, a center for bow manufacturing. Charles Espey, a master bow maker, was kind enough to welcome Dr. Schimleck into his workshop to see the bow making process. He and other bow makers also donated small pieces of pernambuco of varying quality for bow manufacture for experimentation. The samples were divided into three groups based on their quality — poor, good to very good, and excellent — as judged by the bow makers. In collaboration with other scientists several wood properties were measured including density, extractives content, microfibril angle and stiffness. “It was found that quality was positively related to density and stiffness and negatively

Research Notes



related to extractives content,” Schimleck said. “Microfibril angle was very low in all pieces and did not appear to be related to quality.”

The wood quality of pernambuco is known to vary greatly and when wood is purchased by a bow maker they intuitively select for quality. This raises a new question: is variability limited because pieces have already been through an initial selection process for being “the best?” Schimleck believes he may need to study a more variable population to investigate the role of each wood property in determining bow quality.

In the end, Dr. Schimleck did not get all the answers he hoped to find, and plans to continue research on this wood he finds so interesting. One of his goals is to find what qualities of pernambuco best relate to the “excellent” category. “I hope this information could be used to select the most suitable trees for breeding and assist in perpetuating and protecting this valuable species,” He said.



PHOTOS COURTESY OF TASOS ANTONIOU (LEFT), IPCI-CANADA (ABOVE)

› Freshwater mussels are excellent indicators of ecosystem health, but they are disappearing from U.S. waters at an alarming rate. Mussels are highly sensitive to some contaminants when tested in traditional short-term toxicity tests; however, little is known about the effects of chronic exposure to low concentrations of chemicals. Dr. Robert Bringolf and his students are developing new approaches to identify the most sensitive mussel life stages for chemical exposure. The project, supported by the U.S. Fish and Wildlife Service, seeks to identify effects of environmentally-relevant concentrations of a number of emerging contaminants such as hormones, pharmaceutical drugs, and components of common stain guards.

› Dr. C.J. Tsai’s group has found an inverse relationship between gene duplication and alternative splicing that may help explain the evolution between a weed and a tree in their defense strategies, studying a gene important for photosynthesis. Gene duplication occurred in the weed and the new copy serves to synthesize salicylic acid during defense. In poplars, salicylic acid is produced from another pathway that is not associated with photosynthesis. The poplar gene may exhibit its novel splicing to help regulate photosynthesis and defense tradeoffs.

› Explosive growth in paddle-sport participation over the past 10 years has resulted in a significant increase in the number of reported accidents. Three-quarters of the 80 average fatalities per year were not wearing a personal flotation device, a typical risk factor for paddlers. Dr. Gary Green’s survey of more than 2,000 paddle-sport participants indicates that more than 70 percent of paddlers learn safety instruction from family or friends or from self-study. Although they appear to understand the dangers involved, few participants ever receive proper safety training. Green, working with the American Canoe Association, is formulating more effective outreach and service programs to increase safety awareness.



PHOTO BY GARY GREEN

› As the production of biofuels continues to dominate alternative energy efforts, Warnell researchers are trying to answer the question of how it will affect water quantity and quality. Growing biofuel crops has the potential to cause negative environmental impacts because of increased water needs and the use of chemical weed controls and fertilizers. Dr. Rhett Jackson is using funding from the U.S. Forest Service and U.S. Department of Energy to investigate soil conditions and hydrologic behavior at a hillslope near Four Mile Creek, which has the typical topography for biofuel production. Researchers intend to study different hydro-climate areas in the U.S. as interest in biofuels grows.

› Warnell professors Mike Mengak and Steven Castleberry, along with several and graduate students, are studying the population ecology and distribution of the Allegheny woodrat in Virginia. Funded by the Virginia Department of Game and Inland Fisheries, the project aims to revisit known woodrat sites and assess the presence or absence of woodrats; locate new colonies; assess



PHOTO BY MIKE MENGAK

population size; assess genetics of the population and movements between colonies; and determine landscape features that influence woodrat distribution. The woodrat is declining across a large portion of its range due to multiple factors thought to be related to forest fragmentation and landscape change.

Bugged out about biking



PHOTOS COURTESY OF JAMIE DINKINS

By LINDSAY WARD

Jamie Dinkins is a woman of varied interests. She received her undergraduate degree in biology from the University of Tennessee in Chattanooga, where she was on scholarship for running indoor track and cross country. Her athleticism doesn't stop there either — an avid mountain biker, Dinkins was on the Worlds Under-23 mountain biking team two years ago. She continues to ride even now as she pursues her graduate degree, although she laments the lack of spare time get outside and practice. When she can't be enjoying or even daydreaming about the outdoors, she is working to protect it through her graduate study of *Sirex noctilio*, the invasive European woodwasp. With the guidance of Kamal Gandhi, Dinkins studies the life cycle and preferred hosts of the woodwasp in hopes of creating a risk assessment map for the Southeast. "I'm really excited to be working

on invasive insects," Dinkins said. "As the world becomes increasingly connected, the number of invasive insects doing damage to the North American landscape has skyrocketed. It's a fascinating and growing field, and I feel that dealing with exotic insect pests will only become more vital to our economy and environment."

The European woodwasp is currently spreading throughout the Northeast, and one of its favorite places seems to be Syracuse, N.Y. Because of the importance of pine plantations in the southeast, there is great interest and support for research that will determine the preferred host tree species of *S. noctilio* when it advances further south. *S. noctilio* thrive in overstocked, drought-stressed pine plantations, something there is a lot of in the South. They attack trees

by laying their eggs under the bark of the tree while simultaneously depositing toxic mucus and fungal spores in the egg chamber, which develop into a fungus that the larvae feed on when they hatch. The larvae do not actually eat the tree itself; however, their activity combined with the fungus and mucus damages the tree so severely that it usually results in death.

Dinkins and her colleagues must bring samples of the southern species wood up to Syracuse for experimentation, since it would be dangerous to bring the bugs to Georgia where they may have a chance to escape. In Syracuse, they place several logs from several different pine species, including loblolly and Virginia, into a tent full of male and female *S. noctilio*. The female woodwasp lays eggs in the logs. When the progeny emerge months later, their exit holes are counted and measured. The idea is that the more exit holes there are in the log, the more the wasp prefers that variety of wood. In her experiments so far, Dinkins has found that *S. noctilio* preferred Virginia pine over loblolly and scots, and experimentation is being expanded to include eight different species this spring and summer.

Dinkins hopes that her work will contribute to the protection of southeastern forests, which she appreciates for their economic and ecological importance as well as the recreational opportunities they provide. Her interest in the impacts of invasive species comes from her experience with the well-known hemlock woolly adelgid. Growing up near the Great Smoky Mountains, Dinkins saw the steady destruction of the beautiful, massive Eastern hemlock trees caused by this exotic insect. These effects are what spurred her to take on her studies at Warnell. Aside from interest in the subject, she stresses the importance of a good relationship with your major professor when choosing a graduate program and topic. “I absolutely love working with Kamal,” she said. “We are both very interested in applied science, and her curiosity and passion about forest health is infectious. I was originally more interested in botany, but when I spoke to the plant science department about graduate work, they connected me with Kamal. It’s a great match, although 10 years ago I never would have imagined I’d love spending so much time with bugs.”

“I never would have imagined I’d love spending so much time with bugs.”



Matt White: On deck for a new career

PHOTO BY ELIZABETH HAGIN

By SANDI MARTIN

It's not a stretch to find Matt White outdoors. A wildlife major who enjoys hunting, White also owns a few hundred acres of land in two states, fields of green that he intends to manage himself. But it wasn't so long ago that the 31-year-old undergrad could be found on a different kind of field. Now earning a bachelor's degree, the former professional pitcher has settled into a quieter life where wildlife is his game, and baseball's just a pastime.

White, drafted by the Devil Rays as a stand-out pitcher in high school, spent 10 years in the minor leagues before unfortunate injuries led to his retirement. Three shoulder surgeries may have ended his baseball career, but it didn't affect his love of the game. Since retiring in 2006, White has gone back to the university that recruited him — Georgia Tech — to be a volunteer assistant baseball coach. And injuries may have once kept him off the U.S. Olympic baseball team, but he coached a team of talented teens to gold in the Pan Am Games last year in a grueling competition in Venezuela. White helped select the USA 18-Under team of 20 players from the 144 who tried out in North Carolina. They'd hoped the team would do well, he said, but the teens surpassed expectations: They finished the games with a perfect record and ended the seven-year winning streak of a baseball powerhouse, Cuba. White had to take three weeks off in the middle of fall semester, but winning gold was worth it. "It was a rowdy crowd," he says. "They brought in 2,000 military and a 20-piece band to make noise behind our bench. They live for baseball down there."

At one time, so did White. He twice played on that very 18 and under team. It took him to Canada, Fenway Park and Cuba. Later, it got him named USA Today's High School Baseball Player of the Year, with a 0.65 ERA and 98 mph fast ball in high school. He's now grateful to the opportunities baseball has provided him — and for leading him to Warnell. White hopes to graduate this year. He and wife Kristin own 320 acres in Kansas and 50 in Colbert, Ga. He came back to school, he said, because he wants to manage that land properly himself. "I've been fortunate," White says. "Baseball has provided for me a great deal. I've acquired some land, and I want to learn about management and get first-hand knowledge from the best wildlife biologists in the country. I also want to be able to implement management techniques on my property and to help my baseball friends with their properties."

Even without his desire to learn proper management, White coming to Warnell isn't out of left field. He's an avid outdoorsman who hunts and fishes. That's why he chose to pursue a wildlife degree, he said, and Warnell is ranked high for its wildlife programs. When he retired, the Pennsylvania native searched for a degree program that fit his interests and goals. He came here in 2007, and family followed. He and Kristin have two daughters, Charlotte, 2, and Amelia, 10 months. "The tight knit community atmosphere and hands-on training you receive at Warnell has made my college experience a truly rewarding one," he said. "I look forward to continuing the friendships I have made at Warnell, regardless if I choose the path of coaching baseball or wildlife management."

Warnell legacy honored



Carolyn Warnell Bryan (below, with former Warnell Dean Arnett Mace) could not attend the ceremony, so her nieces, Carolyn Warnell Downs and Mary Warnell (above) accepted the honor on her behalf.

She made the donation years ago, but the University of Georgia is still showing its appreciation to Carolyn Warnell Bryan. Bryan, a longtime supporter of the Warnell School and part of its legacy, was inducted into the Abraham Baldwin Society at the recent 2010 Celebration of Support ceremony, an honor for more than two decades of ongoing support. The Warnell family's support of the school dates back decades, when the family patriarch, Daniel B. Warnell, gave a number of pine trees to a UGA researcher to experiment with paper pulp manufacturing. This research led to the rise of a paper industry based on Southern yellow pines and educated foresters from the UGA School of Forest Resources.

UGA's Abraham Baldwin Society recognizes outstanding donations of \$5 million or more. Over the years, Bryan — and her family — has made a number of gifts to help forestry education, and their support of Warnell was recognized in 1991 when the school was officially dedicated and renamed the Daniel B. Warnell School of Forest Resources. In the 1990s, Bryan and her sister, Dorothy Warnell, created a shared planned gift to the school bearing their father's name. After Dorothy passed away, her bequest created the Dorothy Warnell Research, Education and Demonstration Forest, which also helped create the Mary Kahrs Warnell Forest Education Center, named for the sisters' mother. In 2003, Bryan added more than 1,300 acres to the forest, which now has more than 3,250 acres of forestland used for education programs for schoolchildren.

Carolyn Warnell Bryan was unable to attend the Celebration of Support ceremony, but her nieces, Carolyn Warnell Downs and Mary Warnell, accepted the honor on her behalf. The Warnell family's passions are "threads that run from generation to generation that tie family members together," Downs said. "For our family, there are three threads: Forestry and the beauty of nature involved, love of education and the University of Georgia."

By SANDI MARTIN

Leon Neel named 2009 Distinguished Alumnus



Leon Neel walks through the woods with his wife, Julia (left). He and Julia accepted the award from Dean Mike Clutter at the 2009 Homecoming festivities (right).

Renowned forester honored for 60 years of pioneering work

There's a moment in Leon Neel's new book where he describes his very first prescribed fire: As a young boy, he tried to clear out some thick briars that were overwhelming one of his favorite places to play. It didn't go well – the brush was dry, and the fire got a little out of control. He remembers hiding – someone else put the fire out, and he was punished for lighting it up without permission. "It was not a controlled fire," he writes, "but, in its own way, it was a prescribed fire, my first one." Neel got much, much better at prescribed fires as he grew older, even weaving it into a long, well-respected career punctuated by an innovative forest management method.

Last year during UGA and Warnell's Homecoming festivities, Neel was honored for his lifelong work, named the 2009 Distinguished Alumnus by the Warnell Alumni Association and joining the ranks of graduates recognized for their great contributions to the natural resources industry. Neel was an easy choice: A renowned leader in the forestry field, he is respected across the Southeast for his conservation methods and theories and is one-half of the team who developed the Stoddard-Neel system of forest management. Neel (BSFR '50) accepted the award with his wife of 62 years, Julia, by his side. A father of two and grandfather of four, Neel isn't slowing down at all – he still works as a forestry consultant and is publishing works about the unique forestry management method he helped refine.

Meeting Herbert Stoddard was a pivotal moment in his life, Neel says. His training by the famed naturalist affected his career in ways he couldn't predict and helped shape his ideas about sustainable forest management. Neel recently published a book on the system he developed with his long-time friend, *The Art of Managing Longleaf: A Personal History of the Stoddard-Neel Approach*. It details their system, which is sometimes considered a controversial method that calls for "prescribed burning, highly selective logging, a commitment to a particular woodland aesthetic, intimate knowledge of the ecosystem and its processes." As Neel writes in his book, one of the most important tenets of his method is "a deep appreciation born of the woods that one is managing, and appreciation born of intimate experience working and being in the woods." The Stoddard-Neel

PHOTO COURTESY OF BETH MAYNOR
YOUNG/KINGFISHER EDITIONS

Approach uses a unique system that produces economic gain through timber management while creating game populations for hunting and maintaining a pleasant aesthetic. It eschews traditional methods of clear cutting.

Neel's dedication to sustainability is not a surprise to anyone who knows him. He laughs that "my hobby is my life," and in a philosophical conversation recently, he espoused about the innate connection humans have to the planet we so easily abuse. "People think they can survive without being part of the earth, but they can't," he says. Neel is known for his staunch conservation ethic. It's an attitude that he cultivated growing up. When Neel was born in 1927, he was just the latest of several generations in his family who settled in Thomasville, Ga., and became deeply connected to the land. His grandfather had acquired a lot of land and farmed. Growing up during the Depression, however, led to Neel and his family moving in with his grandparents, who helped foster his love of the outdoors. "I was raised by my mother and father who loved the outdoors," Neel said. "They both hunted and fished, and both had interests other than killing something or catching something. They were interested in the habitat. They were interested in life."

His parents helped spur his interest and love of the outdoors, but it was Stoddard that helped nourish that affection. At one time, the two managed several thousand acres of longleaf pine forests in South Georgia and North Florida. They influenced management practices across the Southeast and helped found the Tall Timbers research station, which produced groundbreaking work in fire ecology. After his mentor died in 1970, Neel continued to refine their management theory, which grew in popularity.

Lindsay Boring, an adjunct faculty member at Warnell and current director of the Jones Ecological Center in Newton, threw his backing behind Neel being named the 2009 Distinguished Alumnus, calling him a passionate and committed leader in forest management, education and outreach. During his nearly six-decade career, Boring said, Neel has worked with generations of natural resources professionals and landowners "and has clearly demonstrated his commitment to sharing his knowledge with students of UGA and several other universities." Neel's contributions to the forestry industry, Boring wrote in a letter nominating him for the honor, are immeasurable. "I have never known an individual more deserving of this award through his contributions and commitments to students, the profession and our region."

Neel prefers to brush off the accolades, even though great Southeastern plantations flourished at his hands, including the Greenwood Plantation in the Red Hills area. During a recent conversation, he steers the conversation back to his personal philosophy of life and how those connections should be considered in forest management, including how prescribed burns will affect the hundreds of species of life in the woods. "Life is what we're celebrating," he said. "Life is what's all about."



Now Accepting Nominations for

ALUMNI STEERING COMMITTEE,

YOUNG ALUMNUS AWARD & DISTINGUISHED ALUMNUS AWARD

If you would like to nominate an alumnus for the Steering Committee, visit our web site, download and return your submission form to the Warnell Alumni Office by Friday, Sept. 17, 2010.

Nominations for Distinguished Alumnus must be received by Aug. 20, 2010. Please mail a letter of nomination to: Dean Michael Clutter, Warnell School of Forestry and Natural Resources, University of Georgia, Athens, GA 30602.

Young Alumnus nominees must have graduated from Warnell within the past 10 years and be under 40 years old.

Contact Emily Nuckolls at (706) 542-0713 or enuckolls@warnell.uga.edu for information.

Motoring into a new field

By SANDI MARTIN

“At heart, I’m a silviculturist. I love growing trees.”

Lincoln certainly didn’t become a forester because it was in his blood. He doesn’t have any family in the forestry industry. At one time he was a certified mechanic, a skill he has decided is far more fun as a hobby. Instead, Lincoln can chalk his career path up to an innate curiosity borne out of many hours in the woods on the prowl for game. “As I was hunting, I always wanted to talk to a forester and find out why they do the things they do,” Lincoln said. “It stoked my interest.”

That casual curiosity led to degrees in forestry at Abraham Baldwin College and later, the Warnell School. And last October during Homecoming festivities, it led to the Savannah native being named Warnell’s 2009 Distinguished Young Alumnus. Winning the award, Lincoln said, was a “shock to me.” Nominated by his fiancée, Erin Moore, also a Warnell grad, Lincoln was tapped for the award by school leaders for his support of the school and professional accomplishments since graduating with a M.S. in forest resources in 2005. Lincoln, who left a position as a reforestation technician to attend Warnell, now works for Forest Investment Associates in Atlanta. He now oversees the company’s timber activities on more than 300,000 acres in Arkansas and Mississippi. He said he enjoys working for the small company of just a few dozen employees. “They trust you to do your job well,” Lincoln said. “That’s nice.”

Getting here wasn’t a straight path. After he steered away from being a mechanic to become a forester — “At heart, I’m a silviculturist. I love growing trees.” — he earned his A.S. at ABAC, signing on at Mead Coated Board following graduation. There, Lincoln attended night classes to earn a business degree. “I thought that would get me on my career path in forestry,” he recalled. But it was his Mead boss who steered him toward Warnell, telling him to get his bachelor’s degree in forestry. “I worked with a bunch of good guys at Mead,” Lincoln said, praising their support. They even helped him with his Master’s degree project.

These days, he’s planning his May 14 wedding to Erin, who he met while they were both attending Warnell. And when he finds the time, he indulges in his former life: Restoring cars. He keeps “projects” at his mother’s home in Atlanta, his father’s home in Savannah and Erin’s home in Athens. He lives in Atlanta, he laughs, so he’d need a bigger place to store all of his cars in one place. “But then I’ll have to become a commuter in Atlanta, and that’s my biggest fear.”



COME BACK

to where it all started

By EMILY NUCKOLLS

“Emily, no matter what college you choose, I will be proud of you. And if you go to UGA, I will pay.”

While I knew deep down in my heart my father was joking, come graduation day there was a Georgia flag flying proudly outside our home. Growing up I had attended many UGA Homecoming games— my mother would buy me a new red and black dress and my father would buy me a corsage to wear. My total ensemble was only enhanced by as many Uga stickers as I could find and wear before my father would tell me to remove some. UGA was my dad’s thing, and I was so proud and excited to be let in on those special Saturdays.

When it was time for me to begin choosing a school of my own, however, it wasn’t the promise of more football, more red and black clothes, and an endless supply of Uga stickers that drew me to the University — it was the community, friendships and pride I saw my father enjoying. I wanted to be a part of something bigger and lasting -- a community and network that would extend long after graduation and keep me coming back to Athens as it has for my father and his college friends. But I also wanted something that would connect me to people around the world.. We are a community spread around the globe and united by more than just football, and I can say that being a part of the Bulldawg Nation is a choice I am so proud to have made and grateful my father made it before me.

But like all dynamic communities, the more you put in, the more you — and ultimately every member — will get.



Warnell has an active and thriving alumni community, thanks in part to its integral role in the forestry and natural resources industry throughout the Southeast. Warnell graduates connect with each other in the field and in the workplace, continuing the bond shared by a quality education and dedication to the industry.

As the new alumni relations coordinator, I have a challenge for you, Warnell alumni: Come back to where it all started. See what still makes us great and let us remind you why you should be proud not only to scream “GO DAWGS!” a few Saturdays in the fall, but to connect that Bulldawg pride with Warnell pride. We host countless speakers, seminars, and alumni events — educational and social opportunities to stay connected. There are opportunities to further your learning through our continuing education programs as well as alumni events across the state that are perfect for networking and catching up with old classmates. Every event I attend I meet more Warnell alums proud to call the school home. Great things are growing here at Warnell, so come home, catch up and maybe learn something new!

For more information:
Emily Nuckolls, Alumni Relations Coordinator
180 East Green Street, Athens, GA 30606
(706) 542-0713 • enuckolls@warnell.uga.edu

CLASS NOTES

1970s

David Hundley (BSFR '78) has been appointed the head of NAFTA Information Systems Portfolio and Supplier Management for Syngenta Crop Protection Inc. He has been with Syngenta since 1981, holding numerous positions within the company in the areas of application development, project management, e-commerce, architecture and IS services. Hundley also holds a master's degree from the University of North Carolina at Greensboro.

1990s

Robert L. Chappell (BSFR '99, MNF '09) moved to Hood River, Ore., to take an internship with Sustainable Travel International, a global nonprofit dedicated to sustainable development and responsible travel. He has now joined the staff as an eco-certification specialist and director of sustainable travel for study abroad. He and girlfriend Tiffany can be found exploring the Columbia River Gorge, the Cascades, remote eastern desert and Pacific coast in their off hours.

Eugene "Buzzy" Hill Jr. (BSFR '96) has been awarded the 2010 Athens-Clarke County Tree Conservation Award, which is given annually to the development that does the best job of conserving and restoring trees during construction in Clarke County. Hill is the co-owner of Cypress Creek Development.

Brian A. Stone (BSFR '99, MFR '01) and wife Kristen announce the birth of their daughter, Evelyn Brinkley Stone, on Feb. 7, 2010. The Stone family lives in Macon, Ga., where Brian works for Forest Resource Consultants Inc. as the company's Appraisal Services Manager.



2000s

Todd Bentley (BSFR '09) has completed U.S. Army infantry and airborne training and will begin training to be a combat medic at Ft. Sam Houston in Texas.

Carolyn Cowden (BSFR '05) married Bryce Keilman on Oct. 24, 2009. The couple lives in Loganville, Ga., with their rescue dog, Winston.

John Doyle (BSFR '09) has joined the Peace Corps. He leaves for Panama in late April 2010, where he will be involved in a 10-week training period before moving to a project site where he will be a Community Environment Conservation Extension Agent. He'll educate Panamanians about how to live around natural resources and care for them, providing in-class education as well as outdoors trips for hands-on teaching. For more information about Warnell's link to the Peace Corps, see the story on Page 6.

Mary Griffin (BSFR '04) has moved to Steamboat Springs, Colo., for a forester's position with the Colorado State Forest Service.

Kylie Hamilin (BSFR '07) married Tim Filkins on Aug. 22, 2009. Hamilin has been working for the UGA Cooperative Extension office as the McDuffie County 4-H Youth Agent since May 2008.

Sharon Valitski Holbrooks (BSFR '04, MS '07) has accepted a position with the Natural Resource Conservation Service as an easement specialist and is relocating to Athens, Ga.

Amanda Hamsley Lang (BSFR '05, MS '08) has been promoted to operations manager at Forisk Consulting. In addition to managing the company's education program and the publication of Wood Bioenergy South, she will take on additional managerial responsibilities for the grown and development of the Foriskstore and for coordinating wood basin studies and forest operations research. She has worked for Forisk since 2005.

Becki Perkins (BSFR '08) has started a Master's degree program at Texas Tech. She is working on predation avoidance behavior by northern bobwhites in response to different threats and is working with a master falconer flying a trained goshawk to mimic avian threats.

Clark Ryals (BSFR '07) has taken a job as a forester and recreation coordinator at the Caloosahatchee Forestry Center with the Florida Division of Forestry in Ft. Myers, Fla. He serves as the forester

We Want To Know What You're Doing These Days!

Please send updated employment information, personal achievements, family changes and new addresses to:
Alumni Office • Warnell School of Forestry & Natural Resources • University of Georgia • Athens, Georgia 30602
Fax: (706) 542.8356 • e-mail: news@warnell.uga.edu

for the 70,000-acre Picayune Strand State Forest in Collier County and the recreation coordinator for both PSSF and the 30,000-acre Okaloacoochee Slough State Forest in Hendry County since November 2009.

Donnie Shelton (BSFR '08) has moved to Monroe and is now working at Foxwater Environmental in Tucker, Ga., as an environmental scientist.

Tymur Sydor (PhD '05) and wife Oksana Korolchule recently welcomed newborn twins Orest and Sofia.

WANTED: CLASS AGENTS

The Warnell School is looking for a few proud alumni eager to help their classmates reconnect with each other through the new Class Agents program. Jim Ozier, class of '86, has already signed up and has already been in touch with classmates to update them on what's happening at Warnell and encouraging them to get involved with alumni events.

Interested in becoming the Class Agent for your graduating year? **Contact Alumni Relations Coordinator Emily Nuckolls at (706) 542-0713 or enuckolls@warnell.uga.edu.**

BUSINESS GROWTH PAYS OFF FOR WARNELL ALUMS

UGA grads going out into the world and making good isn't new – but recognizing fast-growing businesses run by Bulldogs is. The UGA Alumni Association's new "Bulldog 100: Fastest Growing Bulldog Businesses" program netted more than 400 nominations for the distinction. Warnell alumni landed three of the spots — including the top-rated Bulldog business.

Greg Hitson (BSFR '94), **Brooks Mendell** (PhD '94) and **Drew Taylor** (BSFR '98) were honored at a reception in January for their business success, where they also learned their rankings in the Bulldog 100, which ranked companies that have been in business at least five years by their compound annual growth rate for the past three years. To be considered for the honor, the businesses must have at least \$100,000 in annual revenue, operate in a manner consistent with UGA's "Pillars of the Arch" character statement and the UGA alumnus must own half of the company or serve as its CEO, president or managing partner.

Hitson's company, Hitson Land & Timber Management, based in Port Orange, Fla., topped all the rest. It's a great honor, he said. "Everyone that is an alumnus knows the quality of education we received at the University of Georgia, and to be named

one of the top business owners exceeds all of my expectations."

Mendell, who runs the timber market research firm Forisk Consulting Inc. in Athens, was equally thrilled. Forisk was ranked 7th in the Bulldog 100. Every member of our team – we have four full-time researchers – has at least one degree from Warnell, and all of our interns this year are Warnell graduate students," Mendell said.

Taylor's company, Expert Computers in Griffin, was called out at the 61st ranking. He said that although his business doesn't relate to the forest industry he studied while at Warnell, he began in urban forestry as an ISA Certified Arborist/Sales Consultant – giving him an education in business and the service industry. "I am honored to be a member of the inaugural class of the Bulldog 100," he said. "The experience has been and continues to be an experience that I will always remember and be proud of."

The UGA Alumni Association is taking nominations for the 2011 Bulldog 100 class starting on April 15. For more information, visit www.uga.edu/alumni/bulldog100.

Obituaries



George Ashley Allbritton (BSF '59), 76, of Valdosta, died Saturday, Dec. 19, 2009, at the Langdale Hospice House. Born Aug. 21, 1933, in Lowndes County, Mr. Allbritton was the son of the late George Issac and Gladys Minton Allbritton. He graduated from Valdosta High School and served as a radar-

man on the USS Floyd B. Parks under Cmdr. John J. Foote during the Korean War. Mr. Allbritton graduated from the Warnell School in 1959, and while at UGA was a member of the Phi Sigma Pi honor fraternity. He also attended classes at both Valdosta State College and the Georgia Institute of Technology. He was a retired assistant chief of forest management with the state of Florida, as well as an accountant. Mr. Allbritton was a member of the Perimeter Road Baptist Church. He is survived by wife Sylvia T. Einig Allbritton, daughter Cynthia Kay Allbritton McCandless and her husband, grandson Ian Patrick McCandless, four sisters, three brothers, numerous nieces, nephews and cousins.



Jack M. Hall (BSF '48), 83, of Moultrie, died March 2, 2010, in Tallahassee, Fla. Mr. Hall was interred at Pinecrest Memory Gardens. Born July 11, 1926, in Moultrie, Mr. Hall was the son of the late Howard William Hall Sr. and the late Lois Bell Hall. A consulting forester, Mr. Hall was a member of the

Consulting Foresters of America and served a two-year stint as president of the organization. He was a Boy Scout, an Eagle Scout and a member of the Phi Delta Theta fraternity at UGA. He was a member of

Trinity Baptist Church for more than 50 years. Mr. Hall was preceded in death by his wife, Ann Megran Hall. Mr. Hall is survived by two sons, John Hall and Randy Hall and their wives, daughter Barbara H. Dabney and her husband, brother Howard Hall Jr., sister Mary Ellen Christian, and four grandchildren.



Henry Arnold Swindell (BSF '58), 72, of Eatonton, died Oct. 15, 2009. Preceded in death by his parents, Jeneral Benjamin and Francis Rotha Devereaux Swindell, Mr. Swindell is survived by wife Stella Maddox Swindell. Mr. Swindell was a member of the Jayhole Club.

Longtime Warnell supporter **Lenox Thompson "Tom" Thornton**, 85, of Braselton, passed away on Monday, March 22, 2010, at New Horizon's West Nursing Home following an extended illness. Born May 11, 1924, in Atlanta, Mr. Thornton was the son of the late Lenox Thornton and Eva Thompson Thornton. He served in the U.S. Army during World War II and was a retired teacher at Boys High School in Atlanta. Mr. Thornton was a member of Chestnut Mt. Presbyterian Church and a member of Winder Kiwanis Club. Mr. Thornton was a member of the Jayhole Club and Friends of the Arboretum and was a founding member of the President's Club.

THANK YOU TO OUR SPONSORS

The 2009 Alumni Golf Tournament was a huge success thanks to the hard work of our Young Alumni Committee members and generous sponsors. The event took place during Homecoming Weekend at the University of Georgia Golf Course, with around 100 players participating. More than \$12,000 in private dollars was raised to benefit the Young Alumni Endowment for Leadership Training. Once established, this endowment will provide funding for Leadership opportunities such as conference fees and host speakers.

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