

## Quail Populations and Quail Survival Remain Strong in the Red Hills

Most plantations in the Thomasville-Tallahassee-Monticello areas are reporting excellent quail numbers during the first half of the hunting season. Covey finds and covey sizes have increased from last year. These reports compliment our observations of an average survival rate of radio-tagged quail on TTRS thus far this winter. High autumn densities and relatively high winter survival are the primary factors determining both covey numbers and covey size through winter.

We watch changes in survival rate closely on our study areas. It is a clear indicator of quail population fortunes in the Red Hills. Knowing survival rates helps us to make predictions about the upcoming breeding season, which at this point, all signs are pointing for another good year in 2007.



### Thoughts on the upcoming prescribed burning season

It is impossible to write a quail-friendly burn prescription for all properties, but there are some concepts that may provide you with some direction this year. We anticipate above average survival to continue through the nesting season in most of the Red Hills. Therefore, we are expecting above average nest production in 2007. For areas with relatively low bobwhite densities, or where

## GAME BIRD PROGRAM

by BILL PALMER and SHANE WELLENDORF



populations have recently tailed-off, it would be another good year to conduct habitat restoration work, such as hardwood reduction, pine thinning, and/or relatively heavy burning (~70% of upland acres). Each of these practices tends to boost production of nests and survival of chicks which will amplify expected population increases in 2007. However, if you're sitting on a high density population on an area, burning more conservatively (~50%) may be wise to maintain habitat and

help promote survival of your birds. This is important because nest production will be relatively low as you have a lot of birds entering the nesting season. When this happens, management should shift gears to "protect what you have" rather than focusing on boosting production.

## Upland Ecosystem Restoration Project Burning Up Florida

UERP has identified about 70,000 acres for restoration through appropriate timber management and increased frequency of fire. Three areas that have been confirmed include Myakka State Park, Three Lakes Wildlife Management Area, and Blackwater State Forest. These projects will promote quail and other fire dependent species and provide hunting opportunities throughout the state.

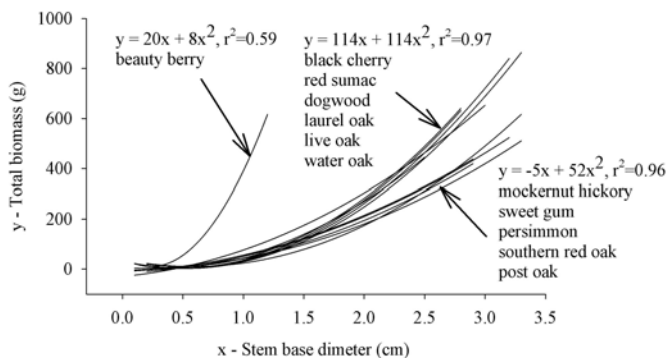


# FIRE ECOLOGY

by KEVIN ROBERTSON

## Estimating Woody Stem Biomass

In order to assess fire behavior or to accurately assess fuel conditions for research burns, we must have an accurate measure of fuel loads. Determining fuel loads is time consuming and labor intensive. However, trees often have a predictable mathematical relationship between stem diameter and their above-ground biomass that is species-specific. Knowing that relationship makes it easy to estimate above-ground biomass, which is useful for predicting fuel loads and productivity of the ecosystem. Such equations have not been worked out for individual species of most of understory hardwoods in south Georgia and north Florida upland pinelands. To do so, we cut stems of 13 different hardwoods ranging from



0.1 to 3 cm stem diameter at the base and measured leaf biomass, stem biomass, and total above-ground biomass. The equations and curves that we calculated for individual species tended to form three groups, so in Figure 1 above, species are lumped within each group and their average equation is provided. We will use these data to estimate the responses of understory hardwood productivity to different fire regimes among other research questions.

### Building International Ties

Last spring the Fire Ecology Lab hosted João Tomé of Portugal as a volunteer fire intern for three months while he wrote his thesis on use of fire in the southeastern United States. João

gained a great deal of prescribed burning experience through Tall Timbers and became a certified Burn Boss in Georgia, while we learned about the great challenges of prescribed burning in Portugal, where the practice is just gaining acceptance for fuel reduction and maintenance of pine grasslands and cork-oak shrublands.



João (second from right), giving briefing in Portugal

An important stimulus to prescribed burning in Portugal was the visit of five American U.S. Forest Service employees, led by Art Torrez, who went to Portugal in 2005 by invitation of their government to conduct prescribed fire training. When João returned to Portugal this past summer, only about sixty people were certified to do prescribed burns in the entire country. Now, thanks to his training at Tall Timbers and his Georgia certification, he has become one of those few to carry the torch in the growing movement of prescribed burning in Portugal.



João (center), conducting a prescribed-burn in Portugal.

## VERTEBRATE ECOLOGY

by JIM COX

### Winter Bachman's Sparrows

One of the more exciting moments in any field study comes when you find a jagged puzzle piece of knowledge that fits neatly in a big hole on the board.



*A Bachman's Sparrow banded on the Wade Tract*

We have enjoyed such an experience this winter in our on-going study of Bachman's Sparrows. After hours of toting mist nets and spotting scopes through the

pinewoods of the Red Hills, we've found some individuals maintain year-round territories. That is, several color-banded birds have been observed this winter in the exact same areas occupied during summer months.

The winter ecology of this declining species has been a big enigma for years, and this is the first instance where year-round use of an area has been documented. An interesting wrinkle to the finding is the individuals we see maintaining year-round territories occur on sites burned the previous year. We have not seen any sparrows this winter that held summer territories on unburned sections of our study areas. We believe unburned sites may have lower quality, so individuals abandon sites and move into recently burned areas. We hope to confirm this phenomenon by re-spotting color-banded birds that moved from unburned areas to burned areas. That would help affix yet another loose piece to the puzzle.



### Woodpecker Update

About half the red-cockaded woodpeckers released on Tall Timbers in September have settled in and are now using the artificial cavities provided for them. This is an average retention rate for translocated birds and bodes well for reestablishing a population on Tall Timbers. With a bit of luck, we hope this Spring will bring the first nesting attempt on Tall Timbers since 1981.

## LAND MANAGEMENT

by ERIC STALLER

### New On-site Coordinator/ Land Manager at Pebble Hill

Tall Timbers is proud to announce Brent Widener is our new On-site Coordinator and Land Manager



*Brent Widener, Pebble Hill On-site Coordinator and Land Manager*

of Pebble Hill Plantation. Brent earned a BS in wildlife from the University of Georgia and has worked in the Red Hills community for over six years. We look forward to a fresh perspective on management of this

beautiful 3,000 acre tract. We appreciate the working relationship with Wallace Goodman, his staff, and the Pebble Hill Foundation to accomplish our mutual goals. Brent replaces Chuck Martin, employed in that role from 1990-2006.



an outreach program of



Tall Timbers joined the Wheelin' Sportsmen program with the National Wild Turkey Federation to coordinate hunts for disabled hunters in 2002. In the 2006-2007 deer season Tall Timbers teamed with St. Joe Land Company to provide 23 participants three hunting opportunities. Tall Timbers and Pebble Hill hosted 16 hunters that saw 30 deer.

For more information about the Land Management Program at Tall Timbers, call Eric at 850/893-4153 x 240 or send an E-mail: [erics@ttrs.org](mailto:erics@ttrs.org).



*2006 Wheelin' Sportsmen group photo*

# VERTEBRATE ECOLOGY WISH LIST

By Vann Middleton

The Vertebrate Ecology program urgently needs funding to help purchase **20 radio transmitters at \$250 each** for monitoring of Bachman's Sparrows on Pebble Hill Plantation and the Wade Tract (see enclosed story). Although we

have banded more male Bachman's Sparrows than any other study, radio transmitters will enable us to follow female movements and track dispersing family groups after young have left the nest. New, advanced transmitters for a bird this small operate for four months or more and are needed for the upcoming field season. Please consider helping fund a transmitter or two and help uncover more secrets about this enigmatic bird of the Red Hills.



In order to properly account for your desired intent, please note "*Vertebrate Ecology Program Support*" on your check and send your tax-deductible contribution to us at the following address: **Tall Timbers Research Station & Land Conservancy, Bachman's Sparrow Project, 13093 Henry Beadel Drive, Tallahassee, FL 32312.** Thank you for your continued support!



## Pinewoods Bird Festival

The 5<sup>th</sup> annual Pinewoods Bird Festival takes place April 13-15 at Pebble Hill Plantation. This event showcases the great natural wonder of the Red Hills region, and new for this year's festival is a kids' art contest held in conjunction with the Thomasville Cultural Center. For more details and to register for any of the special field trips, visit the festival web site [www.pinewoodsbirdfestival.com](http://www.pinewoodsbirdfestival.com).



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*Stewards of Wildlife & Wildlands*

Research Notes are  
posted on our website!  
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