

## Covey Call Counts Indicate Regional Increase

We conducted covey call counts on nine properties in the Red Hills during October and early November. Counts indicated a regional increase from Monticello west across the Red Hills. Bobwhite populations were up 20 to 75%. Excellent summer survival of adults bolstered nest production and drier weather helped to maintain higher chick survival.

Increases in bird numbers in the Red Hills follow our prediction of regional increases this year. Bobwhite populations follow increases in rodent numbers which have been increasing over the past two years. Typically bobwhite numbers decline following the fall off in rodent numbers. We believe that we are one year away from the peak of the rodent cycle, meaning bobwhites in our region may continue to increase through 2007. We will keep everyone posted on this!



Remember that early season hunting is very unpredictable as dogs have difficulty finding birds in rank cover. As the season progresses, covey finds becomes a better predictor of bird numbers.

## GAME BIRD PROGRAM

by BILL PALMER and SHANE WELLENDORF



## Fine-tuning Management

During the increasing phase of the bobwhite cycle survival of bobwhites increases dramatically, and during the declining phase bobwhite survival tanks. What does this mean for management? During the increasing periods, survival is less of a concern as predation pressure is lower than normal. Therefore, burning can be more aggressive to create ample useable habitat for bobwhites during late

summer and winter. In these years, burning 75% of the uplands is acceptable and burning larger patches is fine. During the declining phase, managers need to focus on sustaining survival of bobwhites. In this case burn more conservatively, say 50% of the area, and in smaller blocks to increase refuge for the birds during spring. Our studies show burning at a smaller scale increased quail survival. Leaving more nesting cover may help boost early nesting which is important as most adults won't survive the summer in a declining year. Finally, management of mammal predators is probably most effective during the declining phase of the cycle by maintaining higher nesting success as most birds will only get one chance to nest.



*Prescribed Burning*



## FIRE ECOLOGY

by KEVIN ROBERTSON

### Remote Sensing of Burn Severity

The Fire Ecology Program has been awarded a federal Joint Fire Sciences Program grant to test the effectiveness of a national remote sensing method for measuring effects of wildland fires. The system uses LANDSAT satellite data to create maps of the perimeters of wildland fires as well as levels of burn severity within the perimeter. This is done by comparing light reflectance on the landscape before versus after the fire to determine the amount of change in vegetation. Estimates of burn severity have to be calibrated using vegetation plots established on the ground following fires.

This system has been calibrated in various parts of the country, but it has not yet been tested in the pine sandhills, flatwood pinelands, and cypress swamps of the southeastern United States. Our research will involve measuring hundreds of vegetation plots in these three habitat types on the Apalachicola National Forest following prescribed burns and wildfires, then referencing these data to LANDSAT burn severity maps. The project was developed through a collaboration with the regional fire ecologists from the U.S. Forest Service, National Parks Service, and Fish and Wildlife Service housed at Tall Timbers. Josh Picotte, the GIS Fire Analyst, was hired and has begun work on this three year project. The results should make a significant contribution to large scale fire monitoring and planning in the southeastern United States.

### Fire in the Bottomlands Revisited

We have almost completed the 2006 census of the Woodyard Hammock study plot, where all of the trees within a 4.5 hectare (11 acre) plot have been measured every other year since 1978. We burned half of the area in April in a checkerboard pattern. Although trees in the burned areas showed little response one month after the burn, since then 58% of the new trees in the 2004 census (greater than 2 cm diameter) have died, more than twice the number in unburned areas. Burning caused a larger percentage of mortality to the understory species hophornbeam (*Ostrya*

*virginiana*) and blue beech (*Carpinus caroliniana*), which had taken over tree fall canopy gaps and prevented recruitment of other tree species. Future censuses will determine whether or not the burn will promote regeneration of canopy tree species.



*Woodyard Hammock understory opened up by prescribed burning.*

## VERTEBRATE ECOLOGY

by JIM COX

### Red-cockaded Woodpeckers' New Home

Four of the eight woodpeckers released on Tall Timbers in September and early October have taken up residence and appear to be using artificial cavities. That's a retention rate of 50% at this early stage, and we are authorized to move an additional pair this year before stepping back to see how the birds take. None of the birds



*Agency officials and landowners in attendance for the early morning release of Red-cockaded Woodpeckers on Tall Timbers, September 2006.*

*RCW's New Home, continued from page 2*

remained at their release sites, and one bird moved over a mile to an area near the Wade Research Center before it settled down along the Henry Stevenson Bird Trail. This individual is way outside the area where we had constructed artificial cavities, and once we realized the bird was staying put in the pinewoods around the Research Center, Joshua McCormick quickly constructed four artificial cavities to provide this juvenile male with a much needed home. The bird has been heard along the trail several times in recent weeks.

Tall Timbers wasn't the only recipient of juvenile woodpeckers this year. A juvenile female was moved to Beechwood Plantation to join up (hopefully) with a single male moved to this property last year. Much like the move to Tall Timbers, this effort represents an attempt to establish woodpeckers in areas that lost their natural populations many years ago. Many thanks to Mr. Gene Phipps, owner of Beechwood Plantation, for his continued support of our efforts to expand the Red Hills woodpecker population.



*Henslow's Sparrow*

### Wintering Henslow's Sparrows

Our survey of wintering Henslow's Sparrows in the Red Hills region is off to a great start. On Saturday, November 9<sup>th</sup>, a group of seven volunteers helped us band six Henslow's Sparrows on the Wade Tract. The tally included one bird born

this year and five adults. This project benefits greatly from volunteer help because we "herd" the sparrows into nets. If you're interested in participating, contact Jim Cox ([jim@ttrs.org](mailto:jim@ttrs.org)) to get the list of upcoming dates we'll be netting on the Wade Tract. In addition to Henslow's Sparrows, we also netted Swamp and Bachman's Sparrows, a couple of Common Yellowthroats, a Hermit Thrush, and a half dozen Palm Warblers (all the western subspecies).

## LAND MANAGEMENT

by ERIC STALLER

### Longleaf and Wiregrass Restoration

Through a grant from the **Southern Company** and the **National Fish and Wildlife Foundation**, we have restored 100 acres of longleaf pine on sites at Tall Timbers and Pebble Hill Plantation. This project is part of our effort to restore habitat for early-successional species and will be used to determine long term carbon sequestration. Sites were selected and prepared in summer and fall of 2005, trees were planted in January 2006, and survival was measured in August 2006. Survival rates of the planted seedlings were 86% at Pebble Hill and 75% at Tall Timbers.



*Longleaf being planted on Pebble Hill Plantation.*

The **Landowners Incentive Program (LIP)** in Florida has allowed us to plant 25 acres of wiregrass in a 3' x 3' grid, and control hardwoods and bicolor lespedeza through prescribed fire, mowing and herbicides. The wiregrass planting coincided with our longleaf plantings, and



*Wiregrass plantings on Tall Timbers.*

survival was 74% in August 2006. This too will assist in restoring habitat for red-cockaded woodpeckers released in the Fall of 2006 on Tall Timbers.

RED HILLS  
FOREST STEWARDSHIP  
GUIDE



## End of the Year Request—We Need Your Help! *Red Hills Forest Stewardship Guide* Reprinting

*The Red Hills Forest Stewardship Guide* was funded by a grant from the Turner Foundation in 2003. This 78-page publication is the result of collaborative interaction between Red Hills area landowners, managers, foresters and Tall Timbers research and conservation staff. The Guidebook has become a landmark educational tool for those interested in managing their lands with a responsible stewardship ethic. Through stunning visual illustrations and rich descriptive text the publication serves as a roadmap for developing a concrete long-term management plan, with particular emphasis on wildlife habitat management, forest management, and the importance of conserving historic, aesthetic and special natural values of the land.

Since our initial printing of the publication, we have been overwhelmed with requests from area landowners for additional copies of the *Red Hills Forest Stewardship Guide*, however there are only a handful of publications left from this first printing. In order for the *Forest Stewardship Guide* to be available for future requests, a second printing will be necessary, but it comes with a hefty price tag.

If you would like to make a contribution to help fund the reprinting, please contact Vann Middleton at (850) 893-4153 (ext. 343), [vann@ttrs.org](mailto:vann@ttrs.org) or send us your tax-deductible contribution made out to Tall Timbers. Please note the expressed intent of your contribution so that we may adequately account for your gift. Thank you for your continued support of Tall Timbers!

*Happy Holidays!*



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