2009 Terrell Habitat Grant Report

Habitat Restoration for Georgia's Birds: Grassland/Pine Savanna and Bottomland forest/Canebrake restoration projects

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Introduction: This grant was designed to address the declines in suitable habitat for grassland birds, both upland (Pine Savanna) and bottomland (canebrakes). In both habitats, invasive plants have become a significant problem out-competing native warm season grasses in the uplands and native cane (Arundinaria sp) in the bottomlands. This project uses herbicide to reduce/remove invasive exotics in the bottomland habitats, and to reduce the dominance of sweetgum in upland habitats where it invades in the absence of regular fire.

Three Wildlife Management areas were selected, where additional funds could help achieve our objectives in promoting both canebrakes and pine savanna habitat. At all three sites Game Management staff assisted with the planning of treatments, and carried out the management objectives.

Site	Acres	Action	GOS Cost	DNR cost
PINE				
SAVANNA				
Clybell WMA	147	Spot treat HW with Garlon	\$4,000.00	
	47	Thin timber and spot treat HW with Garlon	\$2,500.00	
		Planning, writing Forest management plans, marking timber and overseeing herbicide application		\$1,000.00
	100	Prescribed burning – team of 4-5 (10 man days)		\$2,500.00
Clark Hill WMA	50	Spot treat HW with Garlon	\$3,000.00	
		Planning, writing Forest management plans, marking timber and overseeing herbicide application		\$1,000.00
	50	Prescribed burning – team of 4-5 (10 man days)		\$2,500.00

		With GOS permission – money shifted towards tractor purchase (see appendix A)	\$3,000.00	
CANE WORK				
Big Hammock WMA	20	Velpar L (select sites with cane) herbicide	\$500.00	
	40	Spot treat HW with Garlon	\$3,000.00	
		Planning, writing Forest management plans, marking timber and overseeing herbicide application		\$1,000.00
TOTAL EXPENSE			\$13,000.00	\$8,000.00

Clybell WMA: Two sites were selected for herbicide or thinning and herbicide work at Clybell WMA to create Pine Savanna habitat. An overstocked 47 acre site was selected for spot understory herbicide treatment of sweetgum followed by thinning the pines to 50 basal area. Thinning to this basal area, coupled with the treatment of sweetgum allowed the growth of native understory forbs and grasses. There is a small area along the edge of this stand known to have Pink Lady Slipper (*Cypripedium acuale*), which was carefully avoided during herbiciding and thinning. This site Timber marking and herbicide work was overseen by game management staff. Follow up prescribed fire was also coordinated by game management staff.

A 147 acre site of thinned pine was selected for spot herbiciding to control dense sweetgum and water oak growth. This site along Hwy 11 contains the largest open pine stand on the management area, and holds the best potential to attract pine savanna specialists.

Both sites have progressed well following treatment, with strong response of native grasses and forbs resulting from the successful hardwood control.

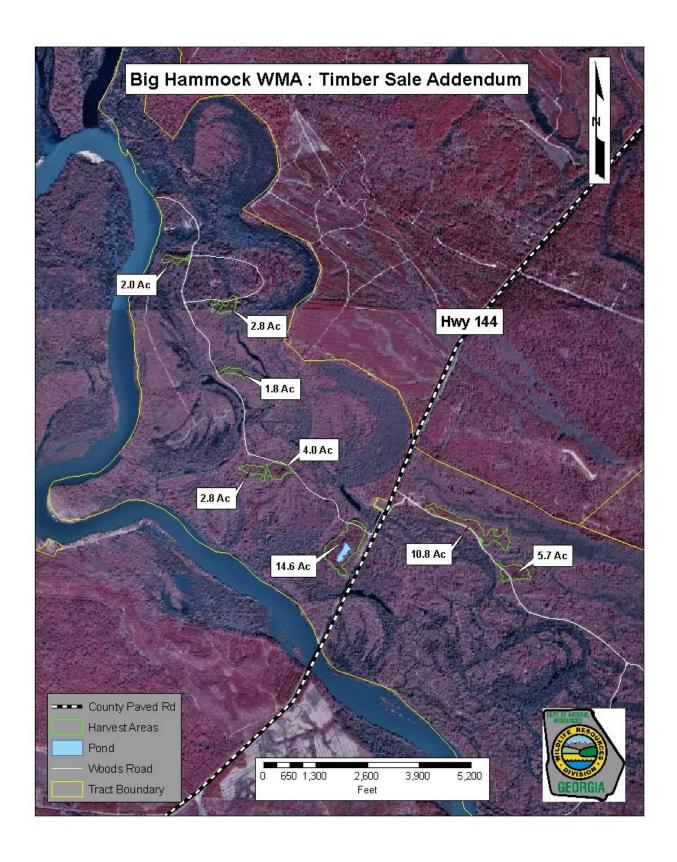
FY10 Forest Management Proposal Clybel WMA



Big Hammock:

A number of sites (see below) that had recently been cut were selected on Big Hammock WMA for cane restoration. While there is a lot of cane on Big Hammock WMA, much of it is restriction to road edges and river banks, where light is sufficient for it to thrive. Dense stands of trees away from the roads shade out much of the cane and it becomes more sporadic. The areas selected for treatment included areas recently cut with remnant cane in the understory. The primary competitor on these sites was sweetgum and water oak. Hardwoods were treated with both herbicide and roller-chopping in order to encourage the growth of cane.

Cane has responded well, the large Flat Lake areas still cane-dominated and some other openings pretty well covered in cane as well. Sites were prepared for burning over the last 2 years but flooding has prevented it. Weather and water-levels permitting, these areas will be burned in order to continue to suppress hardwood incursion into these sites.



Divergence:

- 1) Since the primary biologist overseeing this project changed positions in the summer of 2009, moving to the coast, there has not been the site and bird monitoring originally planned, though all the habitat management work was completed.
- 2) While the herbicide treatment was conducted on Clark Hill, GM was able to cover the expense, so with permission from GOS the money budgeted for herbicide purchase was used towards the purchase of a tractor (see appendix A).