Southeastern Plains Ecoregion: 65
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Field trip Report

Southeastern Plains Ecoregion

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Trip Comments

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SOUTHEASTERN PLAINS: ECOREGION 65 SUMMARY

This was generally a quiet ecoregion with stable land uses. There was evidence, however, of tremendous land use/cover change before 1970 when the region made a transformation from farming to forestry. Throughout the woods we found abandoned houses and along the road side snippets of rusting wire and dilapidated fences. Since that transformation, most residents either moved to hard surfaced roads or convinced local officials to blacktop their road.

In many parts of the ecoregion there was evidence of current and historic federal projects that altered land use and local economies. In South Carolina military bases and projects were common and in Mississippi new highways were being constructed throughout the state. We also crossed the expensive Tennessee-Tombigbee Waterway that connects Mobile Bay with the Tennessee River.

The housing stock varied in quality from block to block, but rural housing generally fell into one of four classes 1) Poor with older houses and both old and newer single width modular houses common, 2) Fair. One hundred year old, one story pyramid houses were typical of this group. 3) Solid, mid-range houses with brick (old and new) and double width modular (new) the most common. These were commonly on acreages. 4) Expensive. These were newer and were commonly brick or neo-antebellum/neo-classical. My impression is that most of the post-World War II houses were constructed before 1980, perhaps during the movement of the population from scattered along rural, dirt roads to scattered and in strips along hard surfaced roads.

We found churches throughout the ecoregion. Many of these (perhaps most) were in rural areas. Virtually every church was well-maintained, many seemed to be relatively new, and many were being enlarged.

The real estate market did not seem to be as viable as the churches. For Sale signs were virtually nonexistent. Most motels provided local real estate catalogs of available housing. There were few speculator houses being marketed (we saw few houses being built or remodeled) and the cost of housing was relatively inexpensive. Food and lodging was also inexpensive. Other than church additions, we saw little construction of any kind.

Rural manufacturing was common in North Carolina, South Carolina near Columbia and Mississippi near Tupelo. Modular housing 'factories' were scattered throughout the ecoregion.

Farming was sparse in most blocks. Our sample sites missed the agricultural islands of the ecoregion such as southwestern Georgia north of Valdosta and North Carolina south southwest of Greenville. Consequently we missed the most dramatic agricultural land use change in the region, the development of massive, industrial hog confinement facilities in North Carolina. Corn was in virtually each block but was never frequent in any block. Wheat was common in most blocks and in the east and south parts of the ecoreigon was double-cropped, probably with soybeans. Because of the boll weevil eradication program, cotton is making a comeback in many parts of the south. We saw cotton fields in one-third of the sample blocks, and we saw several fields with boll weevil traps. We saw few dairy herds but many small goat herds. We also observed several farms where fighting chickens were being raised. One notable absence was any sign of nontraditional agricultural diversification. For example, the only farms where we observed nontraditional crops (e.g. emus, ostriches, bison, grapes,) were in neighboring ecoregions.

Irrigation was scattered and would probably have been more common in some of the agricultural islands, since soil throughout the region ranged from having a sandy veneer to being very sandy. The soil typically was red and deeply oxidized with most minerals leached away. The soils were generally acid; the blue hydrangeas that we observed change from blue in acid soil to pink in alkaline soils. We did not see any new drainage of Carolina Bays.

During June of 2000 much of the Southeast was in the midst of a major drought. We observed evidence of this in short, tasseled corn that was burning from the bottom leaves up.

The most common crop was trees. Regular tree harvesting provides abundant habitat for edge dwelling species and recently cut areas provide abundant food for browse animals such as deer. We saw numerous deer blinds and a news account that Georgia had recently increased the annual deer limit to eight, but we saw only two deer along the roadside and no carcasses. Other than armadillos, there were few animal carcasses along the wooded roadways. The woods were nearly silent of bird songs with typically only a couple of species singing. Logging trucks were common on many roads, and we observed several lumber mills and a couple of pulp and paper facilities.

The Southeastern Plains are generally low lying with many wetlands and swamps. In some sample sites, low, areas were being cropped and the hills were forested, while in other sites the low areas were forested wetlands and the hills were being tilled. We did not know why. We did not have maps of 19th

century farmland to see if today's swamps had been farmed at an earlier time. Since returning from the fieldtrip, I have learned that some of the Coastal Plains lowlands are sandy terraces on clay, which are the last Piedmont sediments between the Piedmont and the ocean. These areas would make better farmland than other wetlands. This may explain why some lowlands are farmed and not others. Some of hills have a layer of course soil that becomes finer with greater depth. These soils are easily tilled, and the finer, deeper zones have greater water retention than some other areas. This may explain why some hilly areas are farmed.

The Southeastern Plains have neo-plantations of great size (up to 10,000-30,000 acres) that were reassembled after the Civil War. Generally the owners do not live on the land, frequently live outside the county, and often live in a different state. Some of the pine groves that we thought were commercial plantations owned by forestry companies may have been individual land holdings.

The temperature and precipitation of the Southeastern Plains provide resources that allows the region to be flexible in terms of agricultural land covers and land uses. Islands with high quality soil (Jackson Prairie in Mississippi, the Black Belt) have maximum flexibility to change to different land uses. One county in the Black Belt, for example, went from no planted to soybeans, to 80,000 acres, to none again in a four year period.

KNOWN OMISSIONS FROM SOUTHEASTERN PLAINS SAMPLES

- Major agricultural islands (e.g. Duplin County, NC; industrial hog farms in NC, and southwest Georgia north of Valdosta.
- Urban growth areas (e.g. Columbia, SC; Montgomery, AL)

ECOREGION BLOCK DESCRIPTIONS

SAMPLE	Observations	COMMENTS
Site 1	DeLorme pp. 62-63; S of Smithfield	
	tobacco cleared land wheat turkeys sandy soil	Little evidence of change. Strip of houses along the road in places; these houses appeared to be 20-30 years old. The amount of cleared land seemed to increase along the major roads
Site 2 Add 2	DeLorme NC p. 73 S of Fayetteville	
	Carolina Bays cotton gin mobile homes trees cotton tobacco corn wheat and other small grains pine plantations a turkey barn and a couple of poultry sheds	This block is more open with larger fields than the first. There was a dense rural population and the housing quality was better. The soil was darker with sandy patches compared with much sand in the first block. The tobacco fields were large and there were some pine plantations. Population growth (new schools). Spanish immigrants (Spanish menus and churches). Driving force may have been rural industrialization.
Route to site 3	International Paper holly farm pine plantation soybeans (often double cropped with wheat)	
Site 3	DeLorme SC p. 36-37 E of Columbia	
	cows pecans McEntire Air National Guard Station (we failed to take a photo) pines & pine plantations	Reserved land was significant in this block. The sample site was situated just east of Columbia, SC with the west edge of the block abutting Interstate 77. It was also sandwiched between Shaw Air Force Base (15 miles east) and Ft. Jackson Military reservation (touching the NW

	farmland making transition to private pine plantations Congaree Swamp National Monument giant Westinghouse plant	corner). The sample also contained McEntire Air National Guard Station and the Congaree Swamp National Monument. This block had more forest than the first two sites; it also had more idle land. We found pine plantations and wheat double cropped with (probably) soybeans. The soil was sandy. There were more houses, perhaps because of the close proximity to Columbia and the military bases. Many of the houses were mobile and modular homes but some were substantial brick houses. Possible driving forces include the growth of Columbia, a city of about 100,000; military bases, perhaps associated with retirement near the base facilities; and rural industrialization.
Site 4 Block 5	DeLorme SC p. 52 centered on Barnwell	
	Sara Lee Sock Co. strip development Savanna River Project Site pine cleared pine plantation (trees had been cut at the age of 21) Big Daddy Deer Processing Photo of pasture—this was not typical Tri-County Pallet Company Watermellons	Public reserved land was again important with the Savanna River Site in the sample and a road from Barnwell into the site. Pines dominated the landscape with little pasture. Local industry that we saw was small and dependent upon local resources such as Big Daddy's Deer Processing and the Tri-County Pallet Company.
Site 5 Block 6	DeLorme, GA pp. 36-37 west of Wrens	
	idle land—CRP ? wheat cotton? red soil dog trot house young pines unknown grass 6 inches tall in the seed stage planted in a field that had watermelons last year ECCI clay mine (kaolin) mine reclamation Seed clover	This block was divided between the Piedmont (NW corner) and the Southeastern plains. It rained while we did this block and we seemed to have devoted most of our time to the Piedmont corner of the sample site. Piedmont section: There was a higher proportion of broadleaf (perhaps because we were in the Piedmont). The sample included a kaolin mine. There is a belt of these mines along the edge of the Piedmont. The block had generally prosperous housing in a

		rural area. The road network was less dense than what we had seen in sites 1-4. There was little new housing, and the housing reflected a more even income level centered on middle class housing.
Site 6 Block 3 add	DeLorme GA p. 44; SE of Dublin	
	peanuts? woods forest wheat pine plantations pasture new pines abandoned houses wetland	This block was nearly devoid of rural residents. The roads carried little traffic. We saw many abandoned fences, which indicate the transition from farming to forestry. The forest blocks seemed to be large, which would probably indicate commercial ownership of the land.
Site 7 Block 8	DeLorme GA p. 43; W of Eastman	
	pecan orchard cotton pines peanuts irrigated cotton muskmelon field goats—lots of goats	This block had no rural industry. Most of the housing was at the town edge and few houses were new. The rural population was sparse. Many rural land holders owned goats. Farmers were growing cotton, pecans, peanuts, and melons.
Site 8 Block 11	DeLorme GA p. 67; W of Valdosta Rachel's block	
	paper and plastic businesses in town pecans Wild Adventures amusement park. The park looked small, was new, and was attracting nationally known entertainers Proprint a large paper making plant owned by Georgia Pacific new watertower new rural water ? Ponderosa pines?? Large estate Retired couple from Ft. Meyers who moved to region in 1980 to	A growing area, but most of the growth was occurring outside the block. There were pockets of old rural subdivisions. There was some evidence of spillover from Florida, but not enough to generalize. Interstate 75 passes through this block and Interstate 10 lies a short distance to the south. I-75 links Florida with Atlanta, the Upper South and the Midwest. Growth in the future is likely. Driving forces include rural industrialization (paper mill), access (Interstate 75) Sun Belt growth, and the movement of population to within 100 miles of the coasts.

	escape the rapid growth of that area Lakes and a swamp New lake construction at town edge for housing development	
	Enterprise, AL: boll weevil monument	
Site 9 Block 4 add	DeLorme AL p. 59, N of Andalusia heart of the drought erosion red soil small pastures hilly and woods in the SE corner pines on old farmland dense rural population pasture peanuts (lots of peanuts) kudzu Gantt Lake reservoir and associated lakeside development sod/turf farm McWilliams power plant and small dam	This block had hilly land with more signs of erosion than we had seen elsewhere. Kudzu was common. Point A Lake reservoir and Gantt Lake reservoir were on the Conecuh River. Gantt had shoreline development; we did not investigate Point A. Gantt also had a small hydro power plant which had been upgraded with the addition of a small natural gas powered generating station. There was a major construction project on the site, but it was behind some buildings so we were unable to discern its purpose. This site was in the heart of the 2000 drought. Crops looked poor; pastures were small. Peanuts were common. The rural population was dense.
	chickens between blocks	
Site 10 Block 2 add	DeLorme AL p. 52; SW of Montgomery and just S of Dublin	
	poor people in poor housing pine/hardwood cuts. The pine was 18 inches in diameter, which suggests a private holding, but the large size of the cut suggested a company. pasture manicured pasture with board fences logs and skidder lack of crops chickens	This sample block had few crops except some chicken houses (poultry accounted for more than three-fifths of Alabama's farm receipts in 1998; http://www.econ.ag.gov/epubs/other/usfact/al.htm) The south half of the block had forests and poor people in poor housing. The north half had cleared pastures, new houses with board fences and well kept pastures. Tom commented that the north part looked like rural Virginia. The driving force in the north half was most likely access to Montgomery. Just east of the block was Highway 231/53 and just west was

		331/9. Both were divided highways going north to Montgomery and connected by Highway 94 which ran along the north border of the site. The north edge of the site was 21 miles south of Montgomery.
Site 11 Block 9	DeLorme AL p. 44; SW Montgomery/SE Selma	
	Black Belt area pastures and improved pastures fences cotton and boll weevil traps fire ants VERY dense rural population in places lumber mill	The north edge of the site was less than two miles from Highway 80/8 a four-lane, divided highway to Montgomery, which was about 9 miles east of the block. This block had four relatively distinctive sub-divisions 1) dense, rural poor, 2) forests, 3) large well kept pastures, and 4) very nice housing on the hills in the west third. Bi-modal rural housing: poor and rich. The poor loved on the flat lands and rich in the hills. High-quality improved pastures with fences. Very stable in terms of land use/cover
Site 12 Block 10	DeLorme MS p. 52 NE of Waynesboro Pam's Block	
	new highway construction that the traffic did not seem to warrant (Trent Lott influence?) small oil field pines and pine plantations chickens private forests (small fields) wheat corn peach orchard few crops—many chickens land in transition from pasture to pine trailer houses	More pasture and fences than most blocks. Few crops with only one wheat field and a couple of corn fields. Some hay with much forest. Rural housing was in high density "clumps" According to the map, the small oil field is one of several. Will the new divided highways become driving forces for future land use/cover change?
Site 13 Block 7	DeLorme Alabama p. 28-29 N of Tuscaloosa. Terry's block	
	deer blind New mobile homes and some nice brick houses First cellars of the trip. fescue and improved hay	This site straddles two ecoregions: Southeast Plains and Southwestern Appalachians Southeast Plains portion There were so few crops that we did not have the

	Shale hills Level IV subarea of the Southwestern Appalachians (68) ecoregion. Transition from red to light soils. cedar trees curly dock, a weed found in old fields and waste places (only ones seen on the trip) cedar trees (only ones seen on the trip) pastures and hay fields large corn field cut forests parts had a Virginia look with new houses surrounded by pastures and cattle shale coal mine For Sale signs large pastures corn Southeastern Plains part wetlands and swamps dairy herd kudzu regenerating hardwood forest	opportunity to determine whether the sand common to other sample areas also exists here. Kudzu was common and we saw one of the few dairy herds of the trip. Southwestern Appalachians portion Rolling hills with more views than in the coastal plains sites. Larger pastures and more cattle. According to the map, the coal mine is one of several. The shale soil appeared adequate for improved pastures and some crops. The land looked much like Virginia, but we were unable to tell how much of that look was cultural with money (perhaps from mining jobs) and how much was the natural environment.
Site 14 Block 3	DeLorme MS pp. 25-26; SW of Tupelo Alisa's block	
	livestock large, open pastures strip of new houses intermingled with mobile homes near Pontotoc houses did commonly have outbuildings, sometimes multiple and sometimes large. pine plantations hickory furniture business hay bales large fields no red soil but gravel two rural furniture factories	This block was about 20 miles west of Tupelo (31,000) and adjacent to Pontotoc (4,600) and about 20 miles east of Oxford (10,000). A sample site with two distinct subregions: the red soil hills and the flat woods land with gravel, and a sandy loam. The flat lands and rolling ridges looked like part of the Midwest with many houses on large (3-5 acre) lots. The houses were set back from the road and multiple outbuildings were common (unlike in our other sample sites). The red hills looked pretty typical of the ecoregion with pine plantations.

	(Kesington furniture was very large) soybeans (not double cropped with wheat) cotton and boll weevil traps sandy loam in places corn no wheat pockets of red soil in the hills cotton gin logging trucks no chickens	