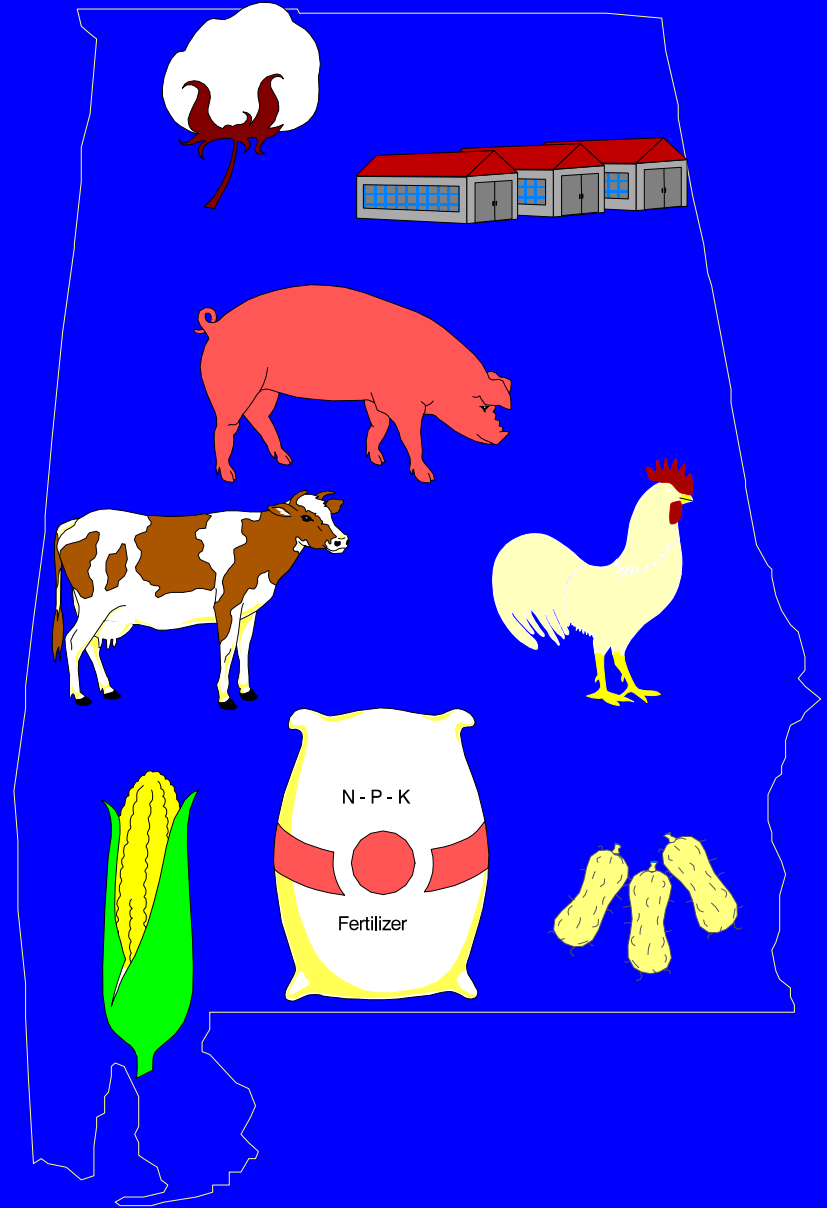
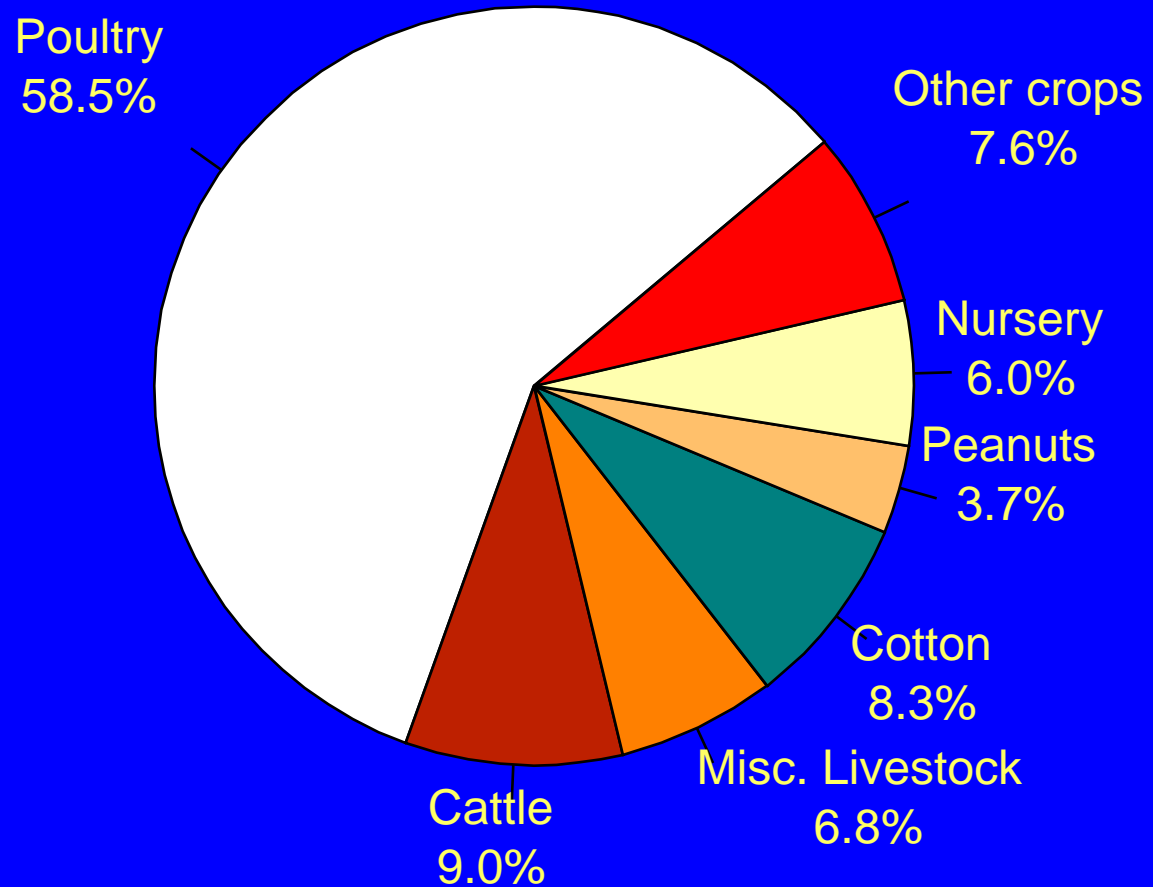
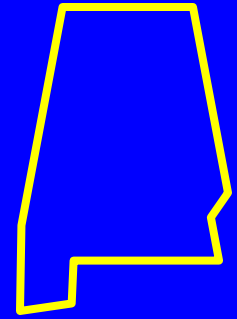


Nutrient Management Planning in Alabama



Gross Ag. Receipts

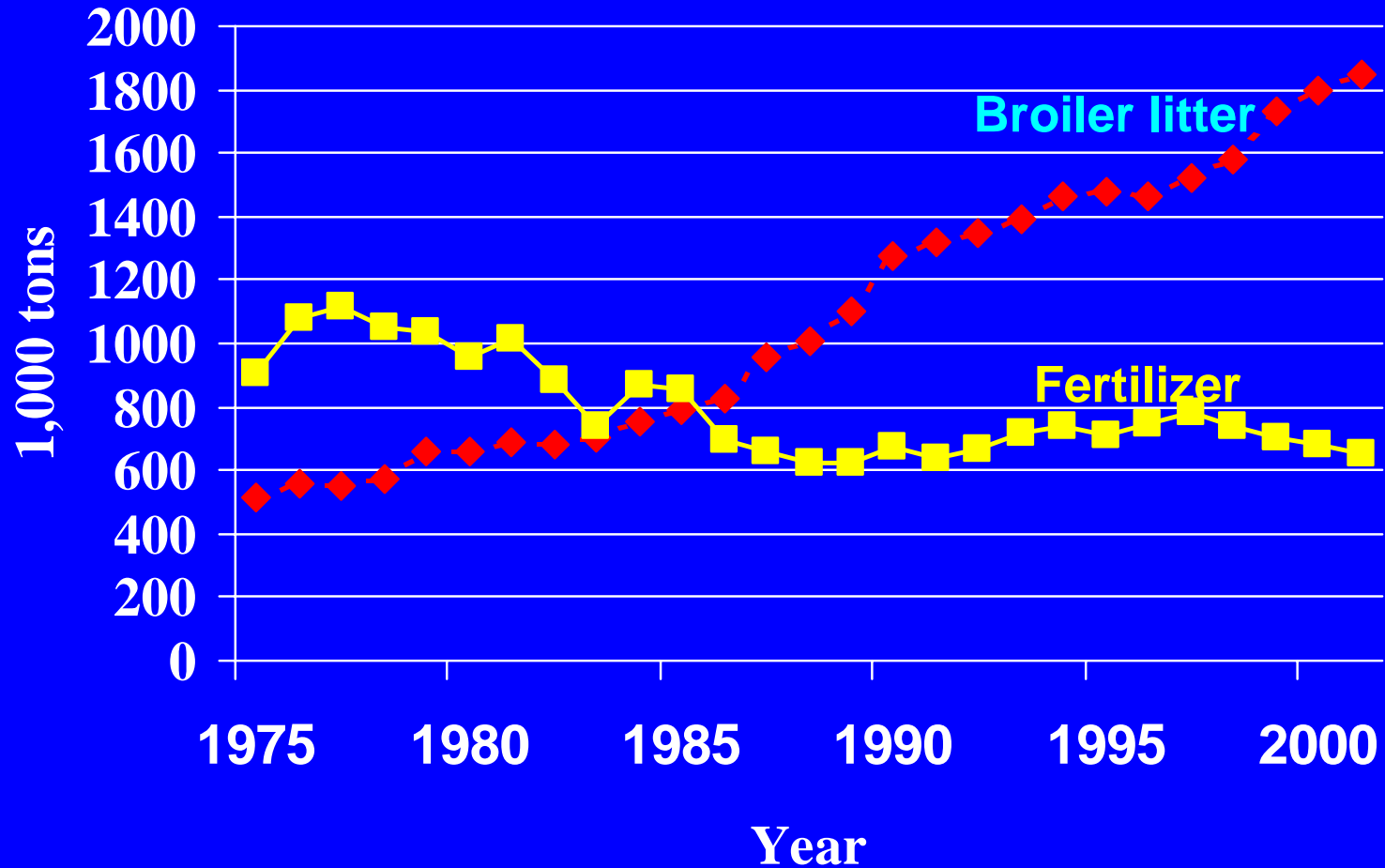
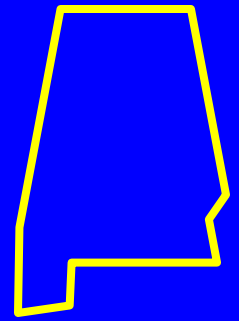
Alabama, 2003



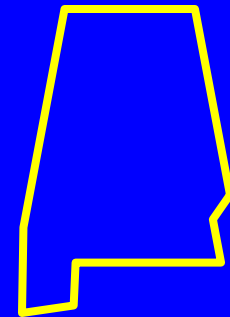




Fertilizer vs. Broiler Litter Used in Alabama



Broiler Litter could adequately fertilize Alabama's row crops

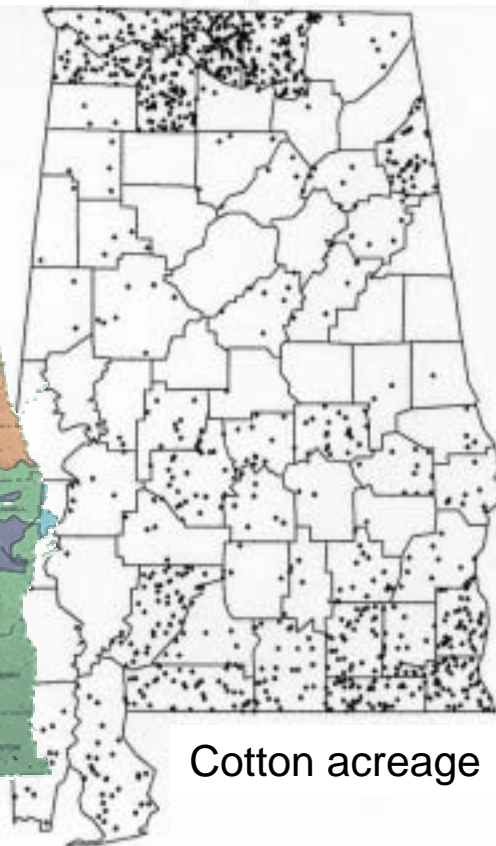
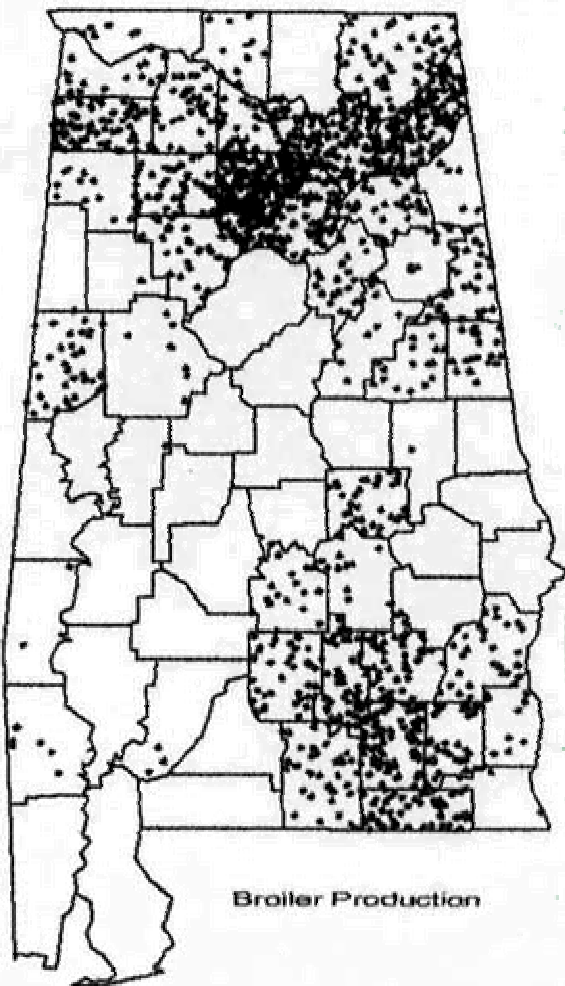


Crop	Acres	Recommended N Rate (lb/acre)	Total tons B.L.
Corn	220,000	120	440,000
Cotton	565,000	90	848,000
Wheat	140,000	90	210,000
	Total		1,498,000

2003 Estimated B.L. production = 1,800,000 tons



Poultry Broiler Production, 2002



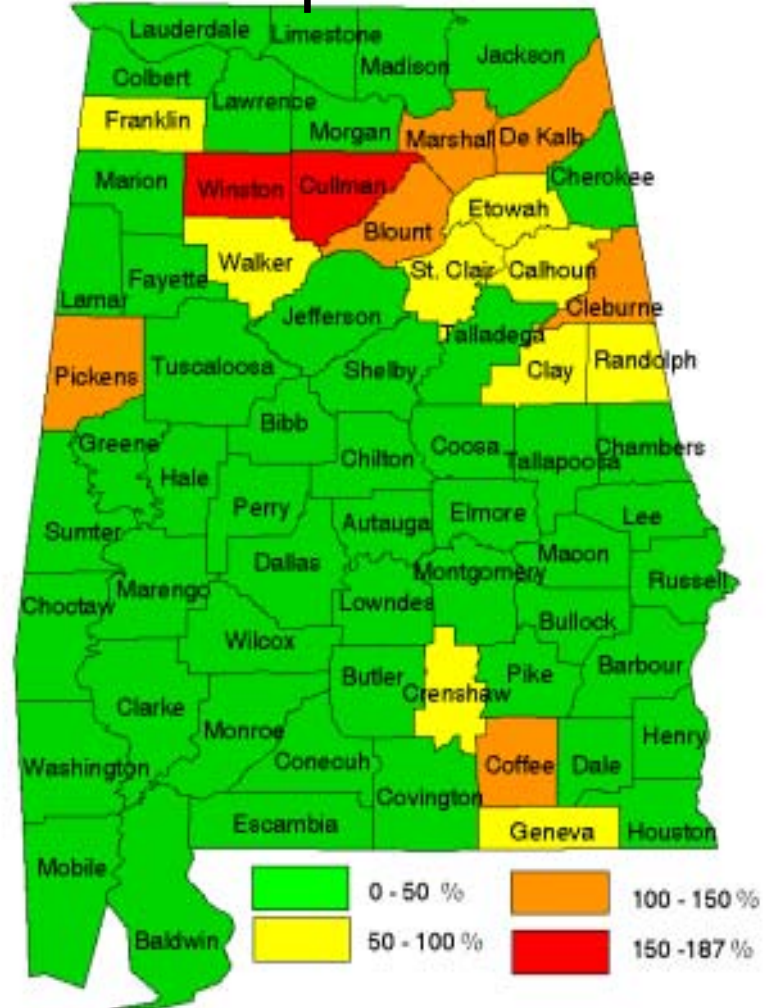
Cotton acreage

Percent of Crop Needs Supplied by Poultry Litter

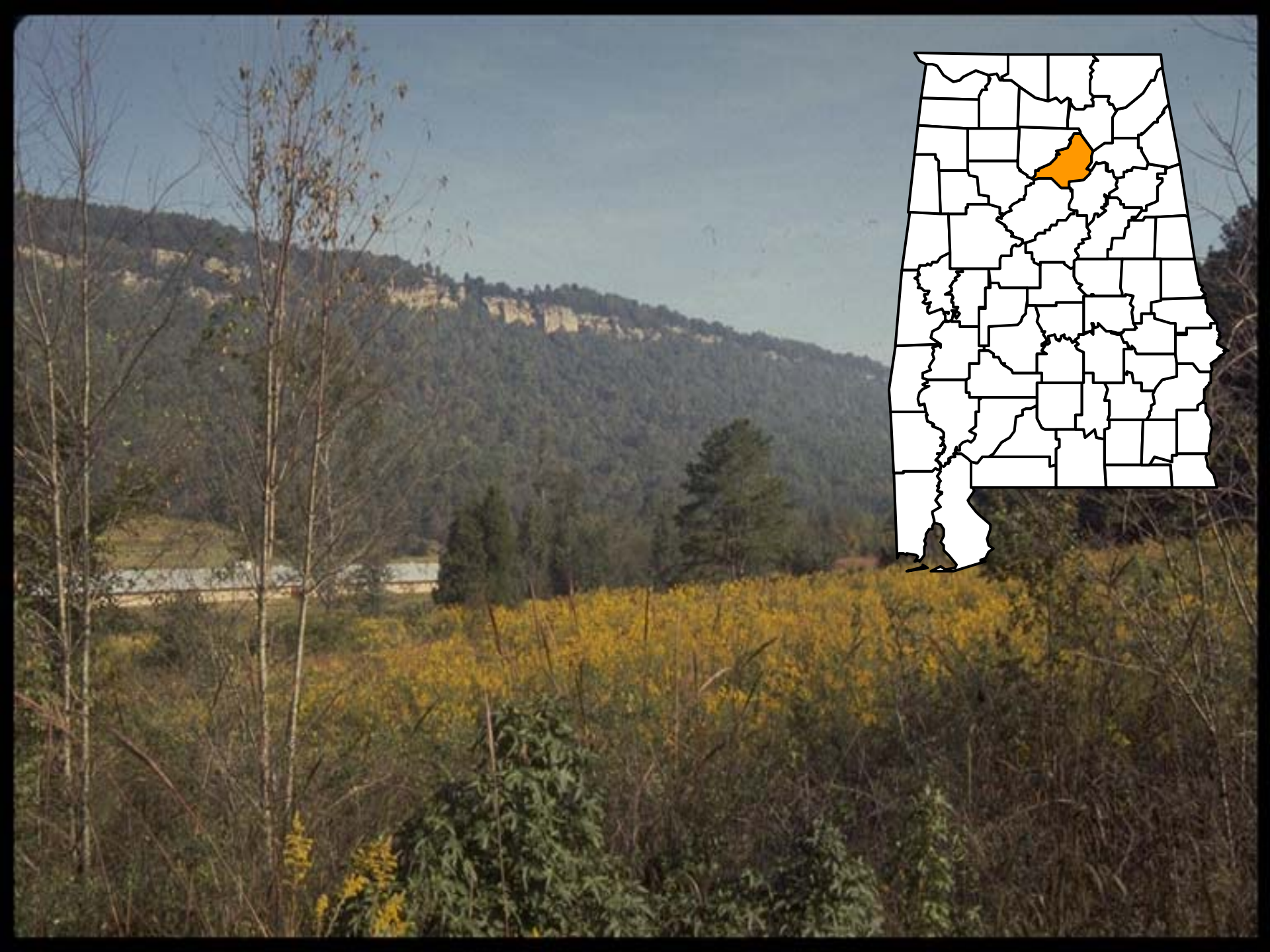
Nitrogen



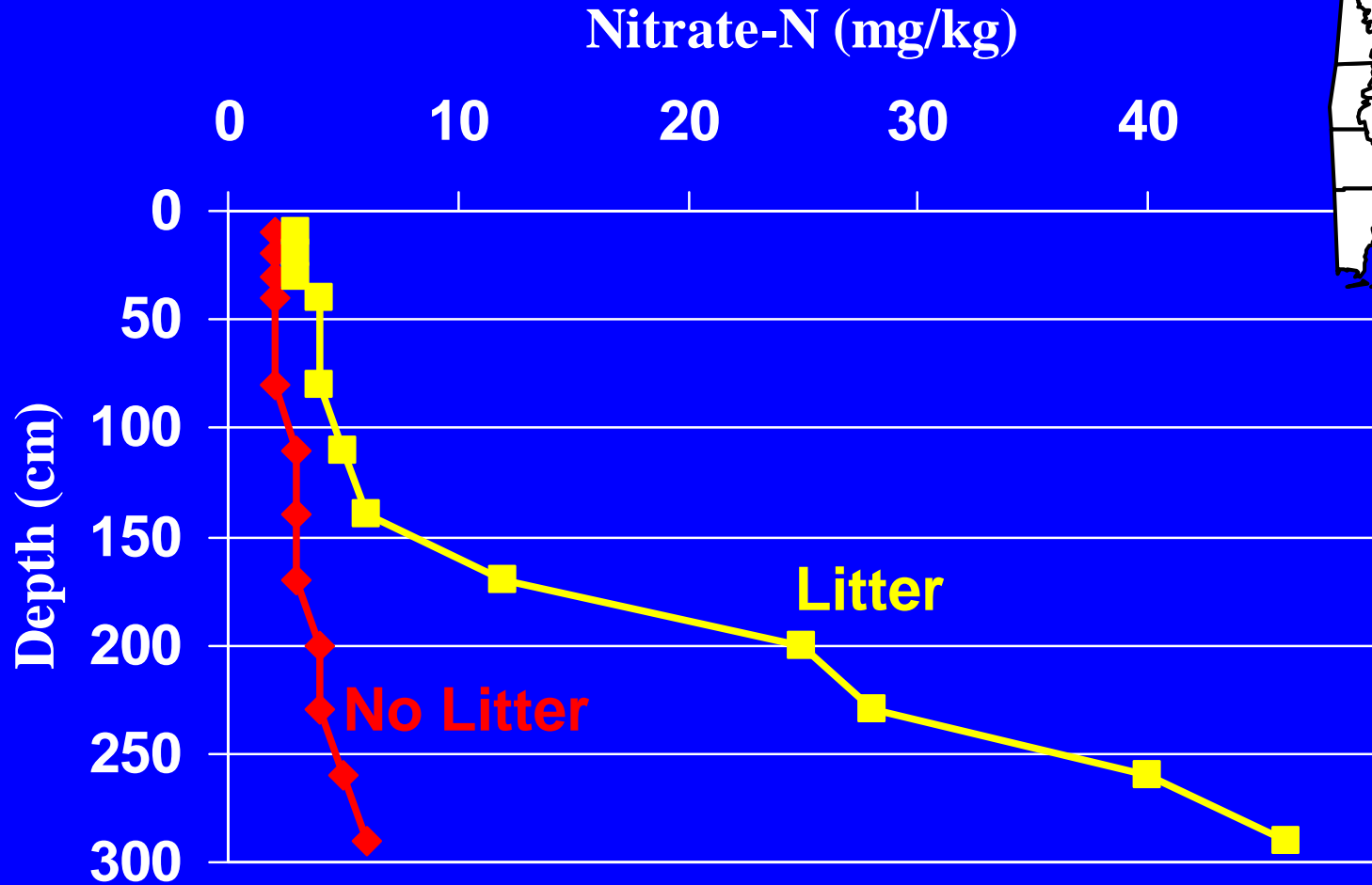
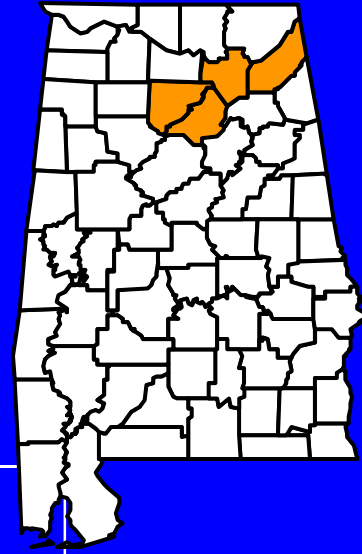
Phosphorus



Source: USDA-NRCS, 1997

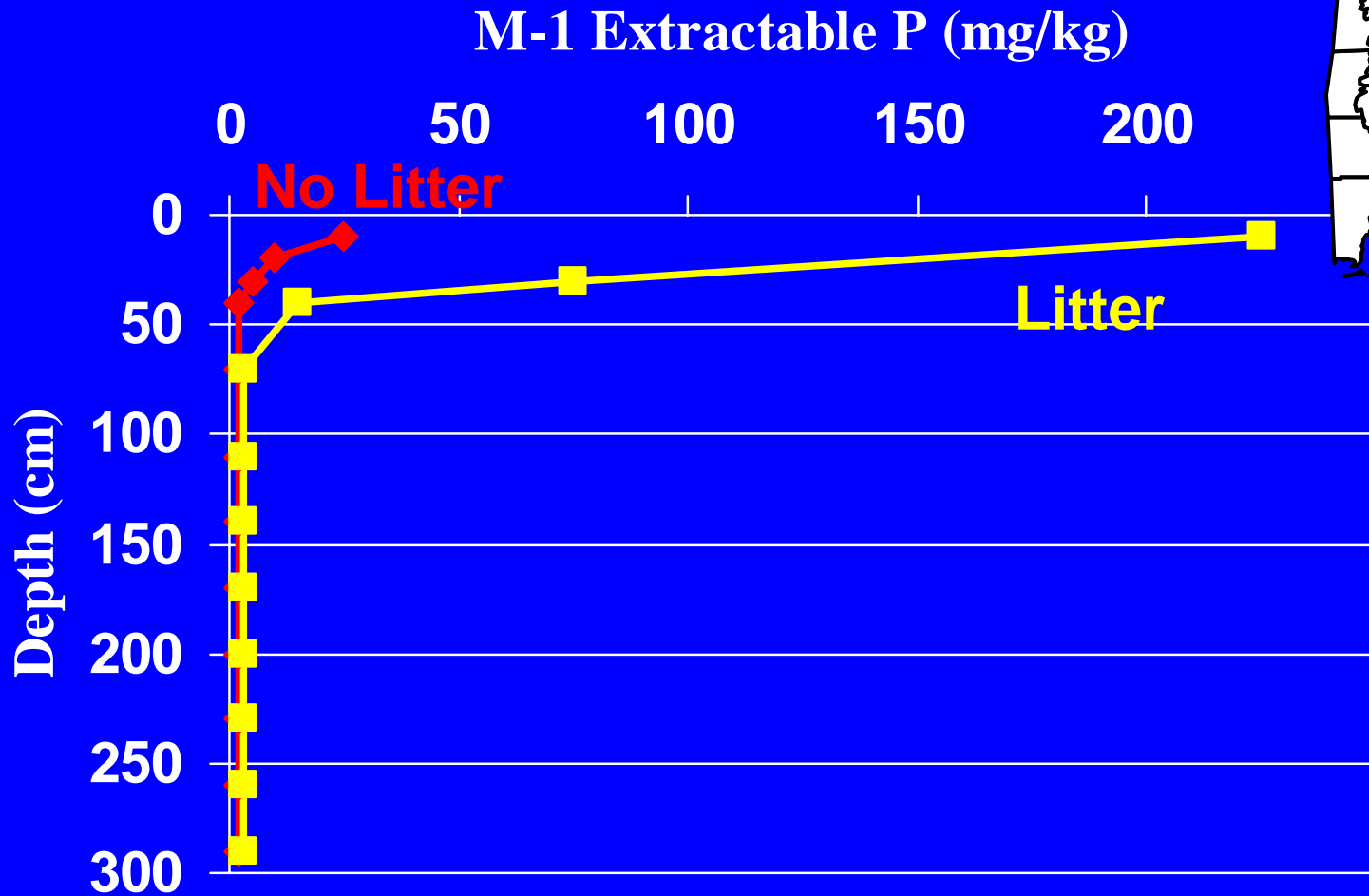
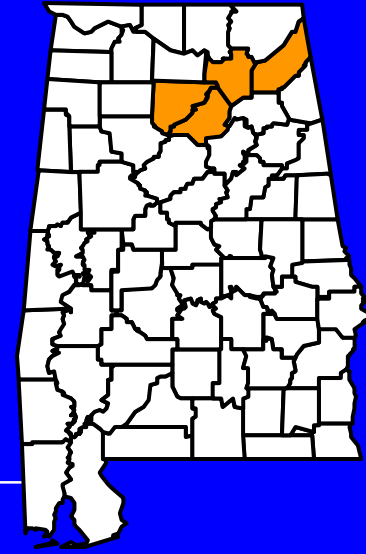


Nitrate-N distribution in Sand Mountain Pasture Soils



Kingery et al., 1994

Phosphorus distribution in Sand Mountain Pasture Soils



Kingery et al., 1994





Animal Waste Management Team



- Extension Team



- NRCS



- ADEM



- Ala. Dept. Agriculture & Industries



- AP&E Association



- Others





1999 AFO/CAFO Rules

(NPDES permit)

Alabama Department of
Environmental
Management (ADEM)

Alabama CAFO/AFO Rules -

Adopted by Alabama Department of Environmental Management in 1999.

A vendor must “. . . effectively manage, handle, transport, store, and properly land apply AFO waste in a manner that meets or exceeds NRCS technical standards and guidelines. . . .”



NRCS Nutrient Management Code 590 -

Adopted by Alabama NRCS in 2001

Establishes Alabama best management practices for “. . . managing the amount, source, placement, form and timing of application of nutrients and soil amendments”



CERTIFIED WASTE VENDOR

Alabama Department of Agriculture and Industries

This is to certify that John Spreader of Cleanwater, Alabama has complied with all requirements of the Alabama Department of Agriculture and Industries and hereby qualifies as a Certified Waste Vendor.

This certificate is void after Dec.31, 2004.

Sworn to me this 19 day of Sept. 2002 by the authority granted to me as Commissioner of the Alabama Department of Agriculture and Industries.

VENDOR CERTIFICATION # 9999

CHARLES BISHOP
COMMISSIONER



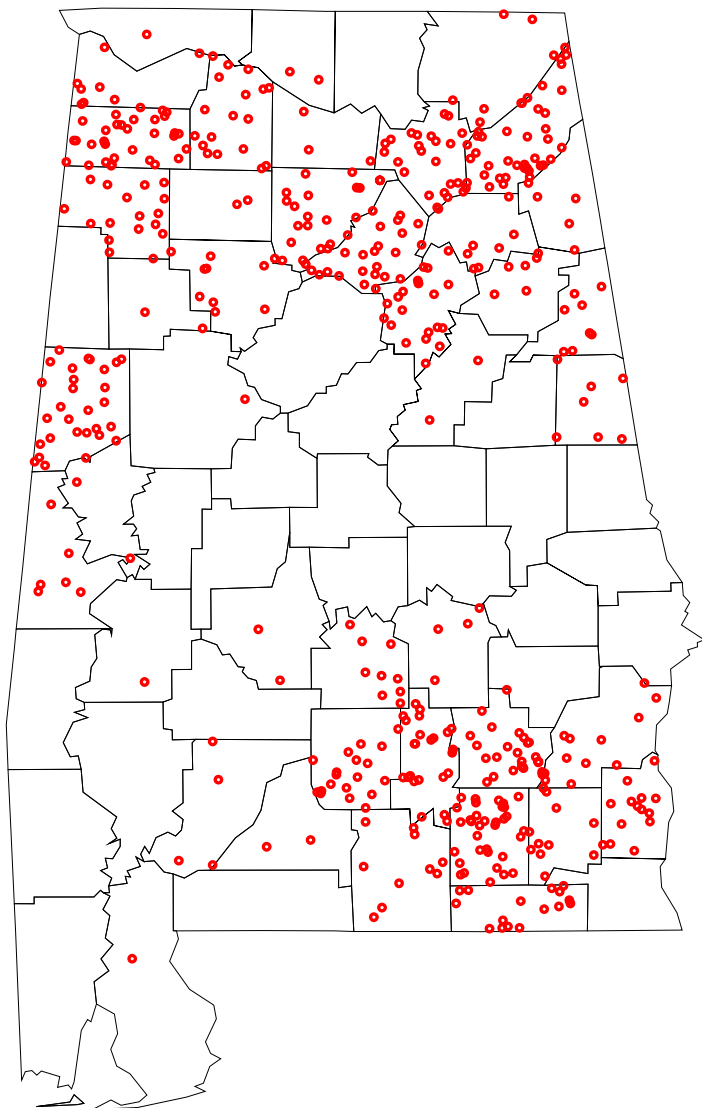
Accomplishments

- **Certified Animal Waste Vendor**

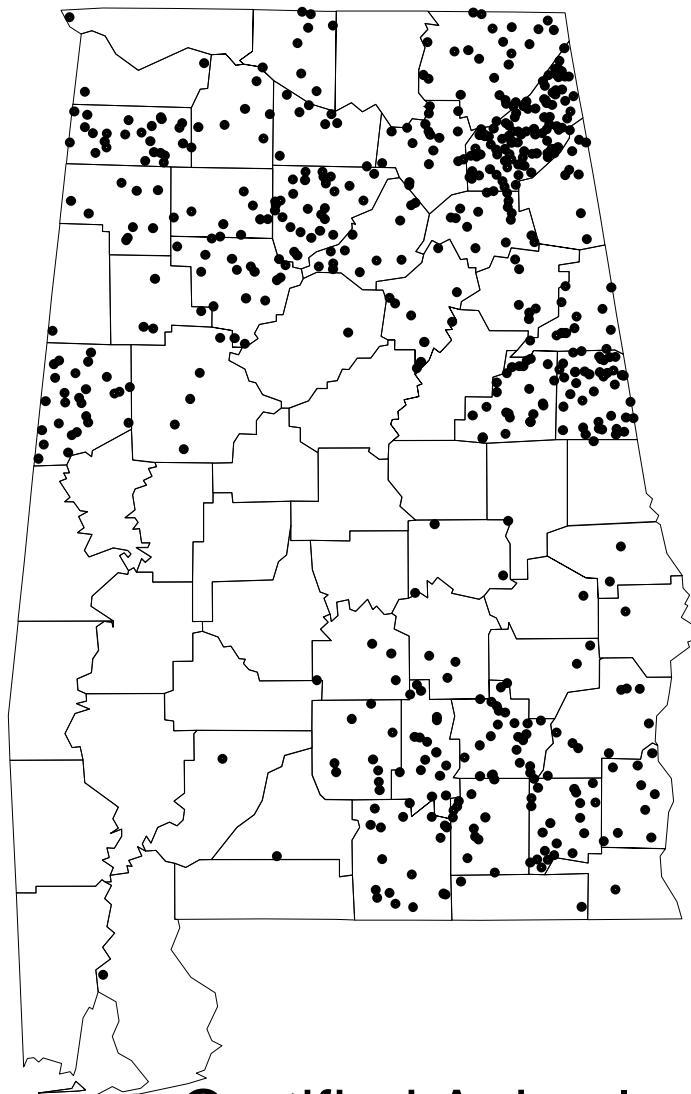


- **40+ classes & Calibration Clinics since 1998**
- **First program in USA**
- **Internet training & certification beginning in 2004**
- **Training by Ala. Cooperative Extension**
- **Certification by Ala. Dept. Agriculture**





CAFO Operations,
2002 (n=494)



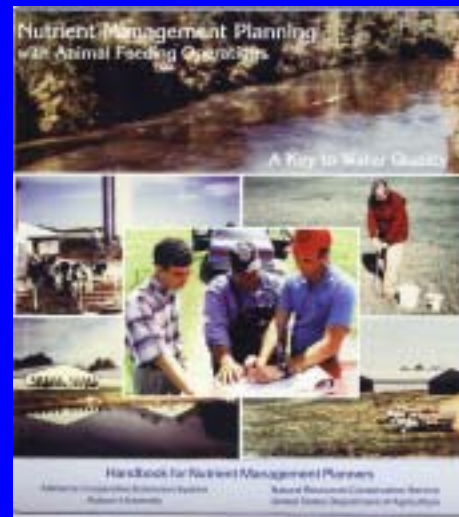
Certified Animal
Waste Vendors, 2002
(n=572)



Accomplishments



- NMP Handbook



- User-friendly P INDEX (spring, 2001)
- CNMP for small AFOs
- In-service training

Quarterly newsletter:

“The Scoop on Litter”

1999 American Society
of Agronomy “Extension
Educational Materials
Award”

Initiated by Frank Wood
and Kevan Tucker in
1997



A Quarterly Poultry News Update

Spring 2000

Published in cooperation with the NRCS

ADEM WEB PAGE SHOWS CAFO REGISTRATIONS

ADEM's WEB page www.adem.state.al.us shows the latest listing of CAFO registrations. All of these are potential categories of Certified Animal Waste Vendors. On this Home Page, click on NEWS, then CAFO REGISTRATION POSTINGS. As of March 5, 2000, 176 CAFOs have registered. Of these, 155 are broiler operations, 90 of which have been approved. Two combination swine/broiler CAFOs have registered but neither has been approved. Three poultry layer operations have registered but none approved. The next largest CAFO category is swine. There are 12 registrations with 3 approvals. Three beef cattle CAFOs have been registered. Two of these, beef cattle stockyards, have been approved. Dairy is the smallest CAFO category at this time with 2 registered and none approved.

-Ted W. Tyson,
Extension Agricultural Engineer

SPRING WINDS BRING CHANGE

Even though the ADEM AFO/CAFO rules have not been in effect for a year yet, winds of change are beginning to blow. The AFO/CAFO Work Group has already met one time in December 1999 and is expected to meet again some time this March. Two areas that will probably be addressed are odor concerns surrounding swine operations and stream setbacks for land application. Odor concerns will probably be addressed by changing the way swine animal units (AU) are figured and by increasing production facility location setbacks from property lines based on number of animals. Stream buffers for land application of all types of animal waste may be increased. This includes land application of broiler litter. If and when any of these changes take place we will use this newsletter to let you know.

-Ted W. Tyson,
Extension Agricultural Engineer

MOVING IT OFF THE MOUNTAIN

Some pastures on Sand Mountain, Brindley Mountain and Lookout Mountain are already overloaded with nutrients. Although there are plenty of poultry houses, Alabama's new AFO/CAFO rules will make it difficult to justify continued application of litter. When litter can't be used close to its source, economic concerns for operators and vendors come into play.

Moving litter off the mountain is a solution. But some vendors say they just can't afford to haul litter more than a few miles and still make any money. Agricultural economists have often used 50 to 100 miles as the furthest point one could afford to haul litter as a fertilizer. Roy Kandrick with the State Soil and Water Conservation District office in Montgomery said there was an innovative idea passed around about a year ago, but it didn't get very far. Why not cost-share some of the expense of moving the litter from counties of intense poultry production (e.g. north-central and northeastern Alabama) to counties with very few animal feeding operations (e.g. the central Alabama Black Belt)?

There are places where litter is being moved. Cotton farmers are using litter as fertilizer in Marengo, Macon, and Limestone counties. Cattlemen are feeding litter to steers in Choctaw, Sumter, and Chilton counties. We just have to figure out a way to make it more profitable to "move it off the mountain." Right now a lack of funds and anticipated administrative problems are holding up the cost-share proposal.

It should be kept in mind that by moving the litter off the mountain both the poultry producer and the environment could be better off. By selling litter to a CAFO, the producer can then buy just the nutrients needed for his pasture and cropland thereby protecting surface and ground water in the area. Poultry producers who have little or no land would be able to abide by AFO/CAFO regulation and continue production.

-Charles Mitchell,
Extension Agronomist-Soils

“the scoop on litter”

Accomplishments



- Animal Waste Management Home Page



<http://www.aces.edu/departments/aawm/>

Bill Prince,
NRCS

Ted Tyson,
Extension, A.U.

John Blake,
Poultry
Science, A.U.

Richard
Hulcher, ADEM

• **EPA Region 4 Environmental Merit Award** (presented Oct. 19, 2000 in Atlanta)

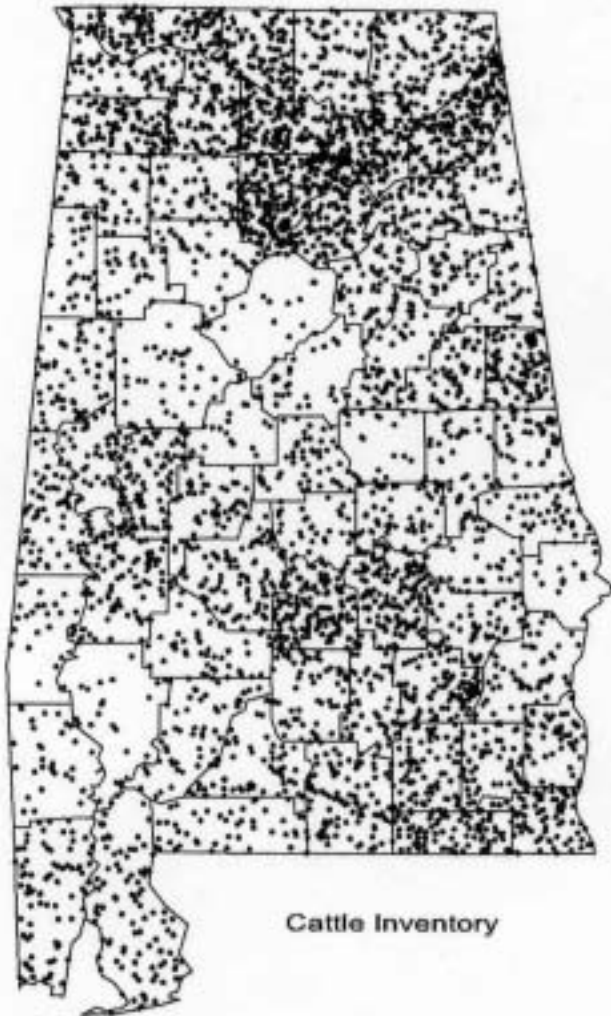
• **AACAA 2004 State Award**

Our short-term goal:

Move Manure off the
Mountain



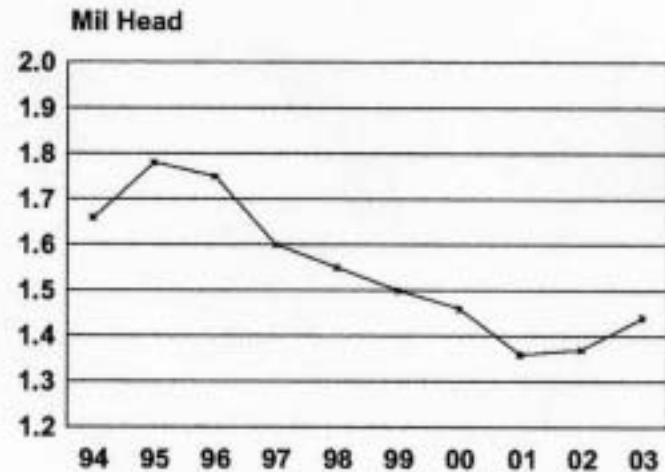
Cattle



Cattle Inventory

Leading Counties	Head
Cullman	67,000
DeKalb	58,500
Marshall	46,000
Lowndes	43,000
Montgomery	43,000
Lauderdale	42,000
Morgan	40,000
Blount	40,000
Jackson	35,000
Lawrence	32,000

Inventory the Past Decade





Your Experts for Life



Prepared by:

Charles Mitchell,

Extension Agronomist-
Soils & Professor,

Auburn University