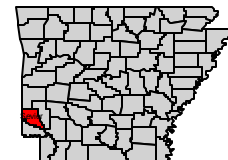


Lower Little River Watershed Phosphorus Index Study

Tyler, R.W.; Stuart, J.; Beaty, S.; Alexander, G.; Wright, V.; Bowling, M.J.; Wenta, S.; Harris, C.; Daniels, M.; Hornsby, Q.



The University of Arkansas Cooperative Extension Service has been providing water quality education in the Lower Little River Watershed since 1992. Initial efforts of the five county program were born out of the Lake Millwood HUA grant funded by the USDA and are currently supported by an EPA Watershed grant.

One task of this grant was to educate livestock producers about Nutrient management planning and Practices. One effort was to demonstrate the Arkansas P-Index as well as phosphorus mining to reduce soil test P on a livestock farm in Sevier County



Producer applies 97 pounds of Nitrogen per acre to increase forage production and decrease soil phosphorus

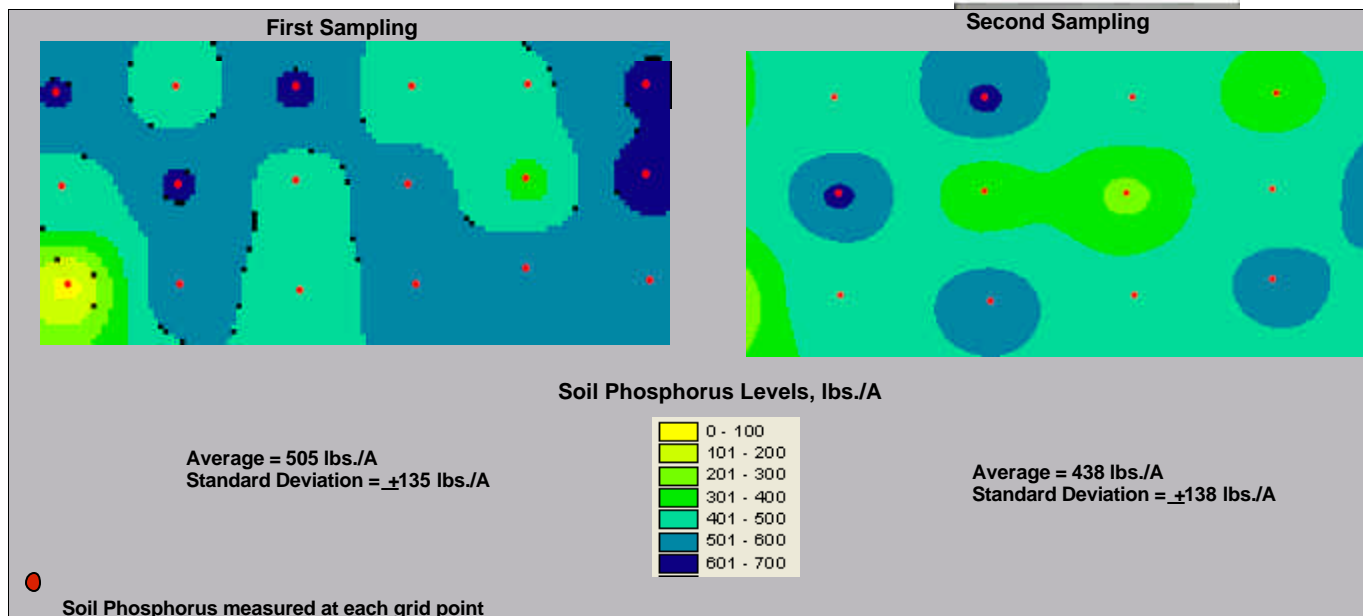
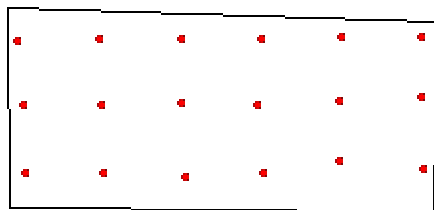


Commercial Ammonium Nitrate applied with a 20X20 foot plot for a control

Eighty pounds per acre of nitrogen was applied and hay harvested approximately 30 days after each application. Removal of soil phosphorus was evaluated through soil analysis comparisons and forage analysis

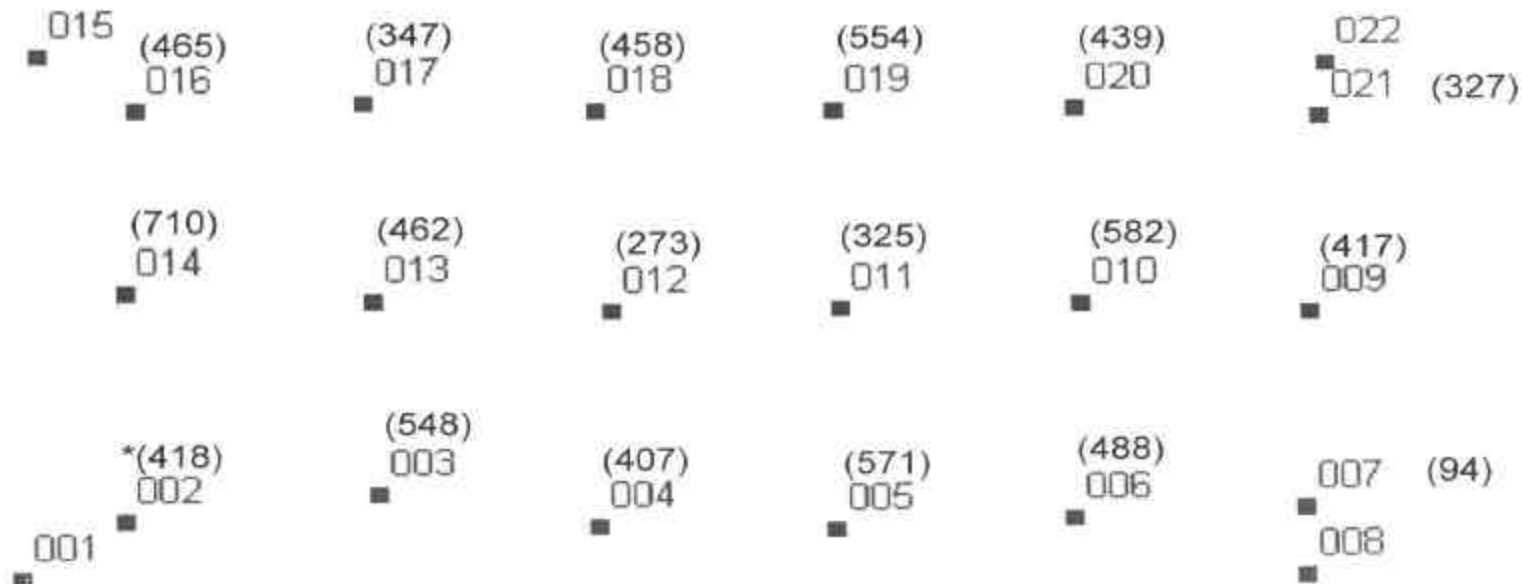
Sample No.	Date	Location	Soil P (ppm)	Forage P (ppm)
1	10/15/08	Plot 1	120	1.2
2	10/15/08	Plot 2	150	1.5
3	10/15/08	Plot 3	180	1.8
4	10/15/08	Plot 4	210	2.1
5	10/15/08	Plot 5	240	2.4
6	10/15/08	Plot 6	270	2.7
7	10/15/08	Plot 7	300	3.0
8	10/15/08	Plot 8	330	3.3
9	10/15/08	Plot 9	360	3.6
10	10/15/08	Plot 10	390	3.9
11	10/15/08	Plot 11	420	4.2
12	10/15/08	Plot 12	450	4.5
13	10/15/08	Plot 13	480	4.8
14	10/15/08	Plot 14	510	5.1
15	10/15/08	Plot 15	540	5.4
16	10/15/08	Plot 16	570	5.7
17	10/15/08	Plot 17	600	6.0
18	10/15/08	Plot 18	630	6.3
19	10/15/08	Plot 19	660	6.6
20	10/15/08	Plot 20	690	6.9

This project utilized a handheld GPS unit in grid sampling a hay meadow that had excess soil phosphorus that had built up through the long term use of Poultry litter.



Soil sample after using ammonium nitrate

Jackson Poultry Farm Phosphorus Demonstration



Samples taken 9/10/03 - after two cuttings of hay and a total of 190 lbs of N (split apps) per acre applied.

200 ft

Date: 01/01/2010
 Time: 10:00
 User: admin
 IP: 192.168.1.1
 Session ID: 1234567890

Category	Item	Value	Unit
Inventory	Item A	100	kg
	Item B	200	kg
	Item C	300	kg
	Item D	400	kg

Category	Item	Value	Unit
Inventory	Item A	100	kg
	Item B	200	kg
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