Mississippi Crop Situation

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This Weeks Planting Report

National Agricultures Statistics Services (Mississippi) Crop Progress for Week Ending 9/06/09				
Crop	**This Week**	**Last Week**	**Last Year**	**5- Year Average**
Corn Mature	97	96	96	98
Corn Harvested	65	44	40	70
Cotton Open Bolls	41	22	37	66
Rice Headed	100	98	97	99
Rice Mature	61	42	62	72
Rice Harvested	18	3	7	21
Sorghum Coloring	100	98	96	99
Sorghum Mature	95	72	72	93
Sorghum Harvested	15	4	26	65
Soybeans Turning Color	58	47	66	84
Soybeans Dropping Leaves	38	22	38	67
Soybeans Harvested	14	4	9	41

This will be the last regularly scheduled newsletter. Others will be sent as needed

Soybean Rust Update

Dr. Tom Allen, Billy Moore, Mr. Jack Bridges, Dr. Malcolm Broome, and Mr. Andy Milling

Soybean rust situation as of September 11, 2009 : Over the past week we have turned 17 counties red on the public website to signify the presence of soybean rust in infected kudzu (Wilkinson County) and soybeans (16 counties). In almost all of the cases the level of rust has been low and detected on late growth stage soybeans, generally R5.5 and more mature, and thus out of the growth stages that are typically considered to be most at risk to a yield reduction in response to the disease. However, at this point it is difficult to find fields in the Delta that do **NOT** contain some soybean rust; typically low levels of the disease. In general this is similar to the situation that occurred at the end of the season last year with one major difference. Based on the overall number of positive counties (47 to date), and the ease

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of detecting rust in almost every soybean field we are several weeks earlier at this stage when compared to 2008. Last year on this same date we had only detected rust in 11 total counties.

With all of that in mind we have also detected soybean rust in a soybean field that will likely see a yield reduction, possibly as little as 5% and as high as 10%. This will mark the first time that we have seen a reduction in yield due to soybean rust infection. One field in Noxubee County, presently at the R6 growth stage was found to contain a severe soybean rust infection last Friday (9/4/09). Large, circular areas (Fig. 1 & 2) within the field were initially infected with rust and defoliation of the soybean plants within these areas was the result (Fig. 1, and shown even more clearly in Fig. 2 taken from an airplane at 1,000 feet). The large patches in the aerial photo appear as bare ground but are in fact defoliated soybean plants. Secondary disease caused by charcoal rot in response to the plant losing all of its leaves has given the overall appearance of brown, dead plants, even from 1,000 feet above the field. Based on the extent of the infection (100% incidence (i.e. soybean rust on every leaf in the field), and severity (level of rust on each leaf) ranging from 50% to 90%) (Fig. 3) the soybeans were likely infected 8 to 10 weeks ago. Since that time, and due in large part to the overly conducive weather conditions throughout much of July soybean rust was able to develop, increase and continue to infect plants within this field and neighboring fields within the vicinity. Based on the dryland nature of this particular field the producer did not choose to apply a fungicide at the R3/R4 growth stage even though the crop has excellent yield potential. However, a neighboring field, immediately across the road, and farmed by a different producer altogether received a 4 oz strobilurin fungicide application at the R4 growth stage. This particular field is not yet at R6 and is already turning yellow due to the high level of soybean rust infection throughout the plant canopy. The most notable difference between the two fields is the presence of leaves in the top of the canopy in the field that received the fungicide application compared to the field that did not. However, severe soybean rust infection has occurred in the mid- to lower-canopy. The fungicide application prevented defoliation from the entire plant and most importantly the top canopy. The field that received the fungicide application will likely see a minor yield reduction that could be attributed to soybean rust.

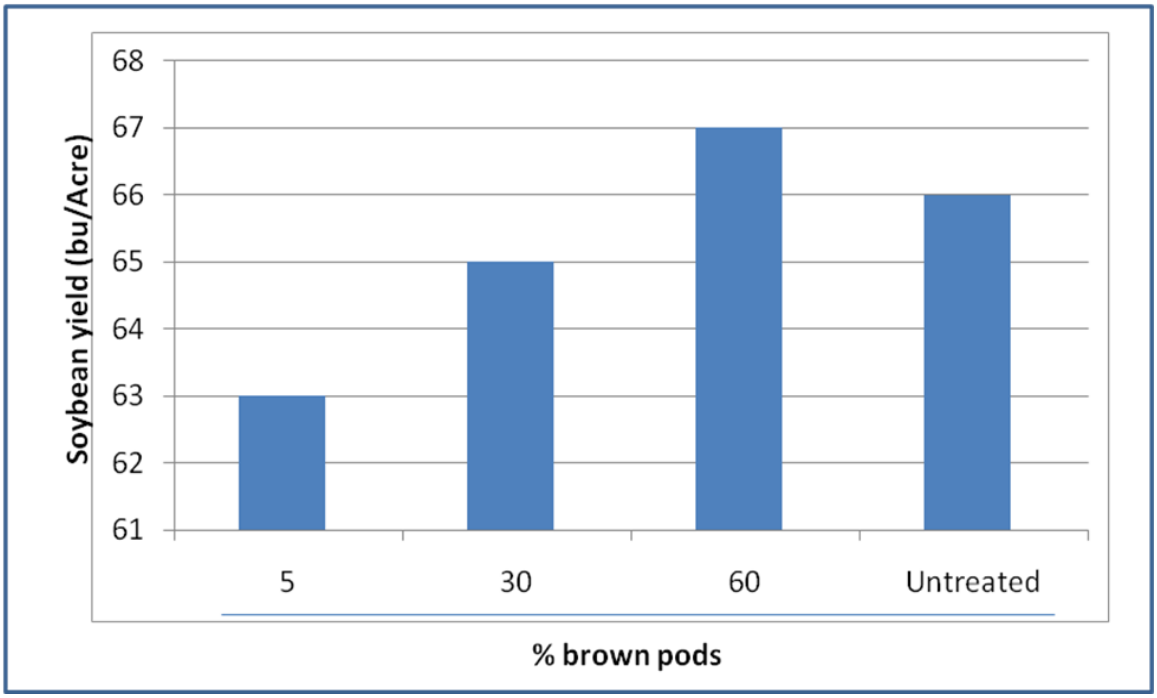
Even with the detection of high levels of rust in a few fields throughout the Delta, and this particular situation in Noxubee County there is no change to the overall fungicide suggestions. The vast majority of our soybean crop is beyond the growth stages where rust infection could

cause a yield reduction. However, information from this particular field situation highlights the importance of fungicide use as a preventative measure against yield limiting situations. The carefully timed R3/R4 fungicide application has benefited our producers by increasing yields (especially in situations where soybeans follow soybeans) in some situations as well as preventing yield loss due to rust over the past two seasons in those specific locations where the disease occurred early. Even though the producer who farms the field in the above photographs will see some yield reduction due to soybean rust he will still likely cut one of the best crops he has ever seen from this particular field. With that said we cannot become complacent to the potential threat from soybean rust. The weather conditions have been extremely conducive for the development and spread of the disease this season. In addition, panicking in response to the detection of soybean rust within a particular county is not necessary. Early detection has been achieved through the monitoring of sentinel plots throughout the state and has allowed us to make the correct fungicide suggestions to protect the livelihood of the state's producers.

Soybean Agronomics

Dr. Trey Koger

Applying harvest aids too early: what happens Excessive green stems, late-season cercospora, and leaves not falling off plants are resulting in tremendous harvest issues with this years' soybean crop. We have applied harvest aids to a lot of acreage to this point and will continue to do so in coming weeks. The tricky part of desiccating soybeans is the decision on when to apply a harvest aid. The following graph shows the impact of applying a harvest aid too early on soybean yield. Various treatments (Gramoxone Inteon at different rates applied with and without sodium chlorate) were averaged across application timings of 5, 30, and 60% brown pods. This trial was conducted over the past two weeks on irrigated Pioneer 94B73 at the Delta Research and Extension Center in Stoneville. Based on this data, **a harvest aid should be applied to soybean having at least 60% brown pods.** Additional data including foreign matter, moisture, and damage is being collected and will be presented next week.



Soybean yields were reduced 2 to 4 bushels/Acre when harvest aids were applied at 5 to 30% brown pods when compared to 60% brown pods.

% brown pods were determined by counting the number of brown vs. green pods on 20 plants per 25 feet of row at three different places within each plot. The same technique can be used at various locations that provide a fair representation of each field.

The following pictures show soybeans from this trial in the 5 and 60% brown pods growth stage.

5% brown pods

60% brown pods

Soybean Insects

Angus Catchot

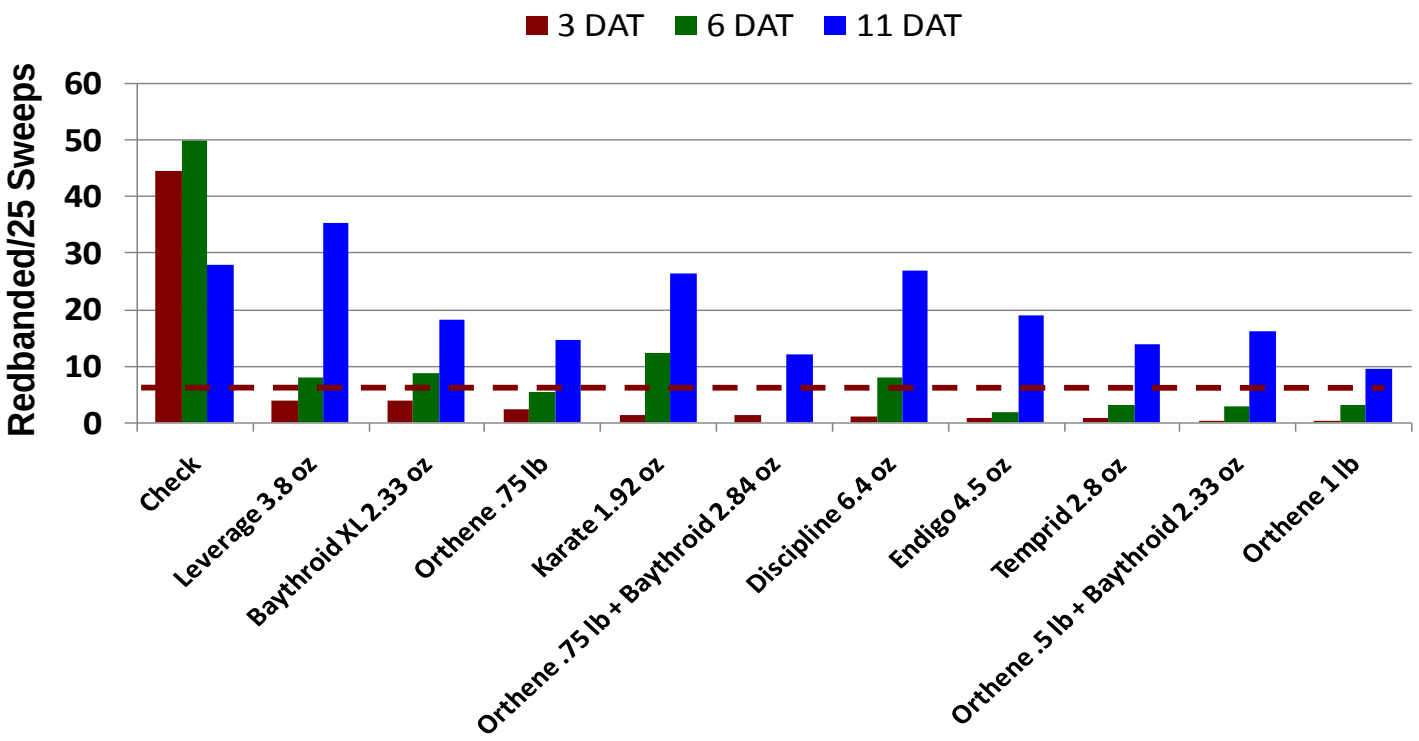
Redbanded Stink Damage Potential: This is an excerpt from an article by M.E. Baur and J. L. Baldwin from LSU where they summarized the results of some of their research on redbanded stink bugs in Louisiana compared to southern green stink bugs. For the complete article click on **Overview of the Red Shouldered Stink Bug** (at the time this was written we were still calling them red shouldered instead of redbanded)

"There is evidence to suggest that the amount of damage caused by RBSB is higher than that caused by either southern green or brown stink bugs. Redbanded stink bugs caged on plants for 15 days at four adults per row meter (about one per row foot) during pod fill (late R5 to beginning R6) in the field damaged about 19% of the seeds, whereas southern green and brown stink bugs (at the same infestation levels) damaged less than 4% of the seeds. No significant differences in yield were observed; however, plots infested with RBSB yielded about 10% less than control plots, and this was in line with the loss observed with southern green stink bug (11% loss). In a greenhouse experiment where 2 adults were infested on caged plants for 15 days during the pod-filling period (late R5 to early R6), the number of fully filled pods dropped by 40% on plants infested with RBSB compared to a 20% drop on plants infested with southern green stink bug. The number of deflated (flat) pods with no observable seeds increased significantly as a result in both plants infested with RBSB and southern green stink bug. High populations (up to eight stink bugs per row meter) of RBSB that persist for an extended period (20-30d) during the pod fill period of soybean development can reduce yields by up to 30%. Lower populations (less than four stink bugs per row meter) that persist for up to 15 days will cause less than 10% yield loss."

Below are the summaries of the two redbanded stink bug test I showed last week. This week I have included the 11 DAT (Day After Treatment) ratings. You can see from the graphs below that every treatment broke by the 11 day sample. This clearly shows the ability of these insects re-infest fields rapidly after treatment and why we are concerned about having to treat them much more frequently in some areas of the state.

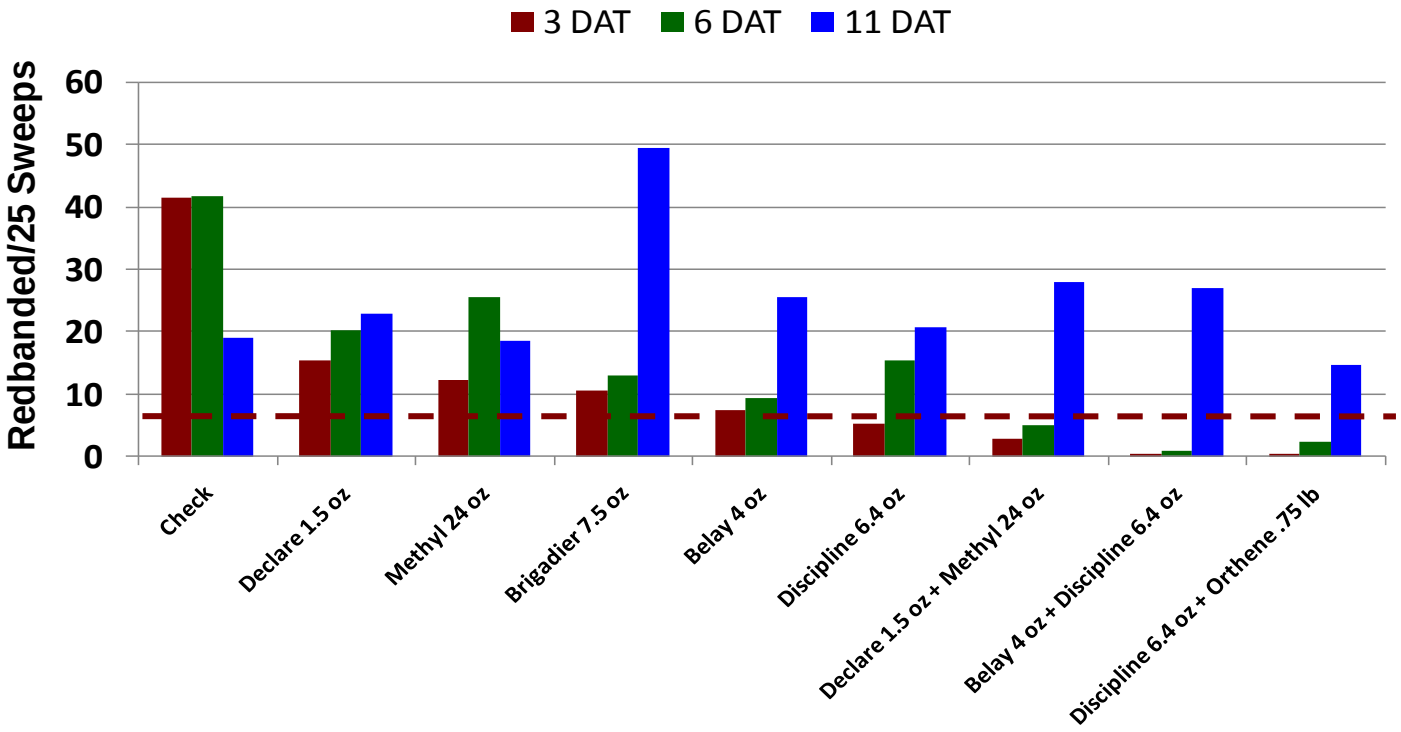
Redbanded Stink Bug (1)

Straight Bayou 2009



Redbanded Stink Bug (2)

Straight Bayou 2009



Rice Agronomics

Dr. Nathan Buehring

Rice harvesting so far this year has been slow, but steady. This is mainly due to the fact that the moisture levels in the rice have been around the 18% plus range. I would estimate that we are around 25% harvested. With the scattered afternoon showers, harvesting has been very minimal this week. High moisture, heavy dews and excessive cloud cover have also affected how much rice can be harvested in a day. The forecast for the next 7 days is not predicted to be favorable for rice harvesting either.

Rice yields so far have been average to above average. The cool and rainy periods in July and August do not appear to severely affected rice yields. I have noticed a lot of blank kernels in this year's rice, but yields appear to holding good. We still have a lot of rice to harvest and we are still draining later planted rice. Hopefully, yields will hold up through the harvest season, but there is still a lot in field.

Market Briefs

Dr. John Anderson and Dr. John Michael Riley

Cotton: Friday's *World Agricultural Supply and Demand Estimates* report (*WASDE*) has mixed reviews for cotton. For the 2009/10 marketing year, the bottom line (ending stocks) is unchanged from the August report at 5.6 million bales (MB). However, much was adjusted to get there. On the domestic production side roughly 100,000 acres were uncovered from the June 30th Acreage report but the level of abandonment was increased 1 percentage point to 15% resulting in a projected harvest of 7.73 million acres. Domestically, all eyes are on Texas where a serious drought is wreaking havoc on the crop. Texas is projected to leave 26% of their crop in the field compared to a 5 year average of 15% but lower than last year's 35%. The lowered harvest area was more than offset by a 19 pound per acre increase in expected yield as compared to the August *WASDE* report (from 816 lbs/ac to 835). The increase comes primarily from the Delta states. The end result is an increase in production to 13.44 MB, up 1.7%.

Over the past few months the US dollar has been sinking in relation to other global currencies. This has provided a boost to US cotton exports for the 2009/10 crop year; which is reflected in the report with total US exports rising 300,000 bales to 10.5 MB. So, the end result is offsetting values on the supply and use side resulting in an unchanged carry over number of 5.6 MB (this includes an increase in the level of unaccounted bales by 30,000). This means that the supply-to-use ratio is at 40% which is higher than last year's 36.7% but much improved from 2007/08 marketing year when the ratio was 55%.

For Mississippi, 2009 planted acreage was increased to 295,000 with 285,000 projected to be harvested. Mississippi per acre yield is expected to be 960 pounds/acre, up from 875 last year.

Looking back at last year's crop, the 2008/09 marketing year, the only changes came on the export and unaccounted lines. Exports were bumped up 80,000 due in part to a weaker US dollar, while the number of unaccounted bales was increased 180,000 bales thus increasing ending stocks to 6.2 MB.

Globally, two countries are in the spotlight: China and India. Both are important players in the regard to cotton. Already in this marketing year exports to China are slipping which is adding

some pressure. On the other hand, India is in the midst of a major drought which will likely open up some avenues for export. In terms of the global balance sheet for cotton, not much is changed from last month. Consumption for 2009/10 is projected at 112.7 MB which is almost the same as last month but within that number is an increase from India and a decrease from China.

The marketing year average farm price is projected at 49-59 cents per pound. Current harvest futures prices are at 61.80 cents per pound for the December contract.

Rice: Rice really took it on the chin in Friday's *WASDE* report from USDA. US ending stocks were increased by 20 million hundredweight (mil cwt), or up by 84%. A number of things contributed to this. First, 100,000 acres were discovered (an increase of 3.2%). Per acre yield was bumped up by 12 pounds per acre to 7,051. All this resulted in more production and when coupled with imports being increased from 254.9 to 269.4 mil cwt total supply was way up. On the demand side more gloomy figures were released. Domestic use was lowered to 129.5 mil cwt, down from 132, and US exports were lowered 96 mil cwt, down 3%. This gives a stocks-to-use ratio of 19.5%, up from last year's 13.5%.

So, in summary, more US supply is projected with less demand none of which is good news for rice producers. Despite all this bearish news, USDA is calling for no change in the marketing year average farm price for all classes of rice (currently at $13.65-14.65/cwt, no change from last month). It is hard to see a situation where supply is increased, demand is lowered and no change is price comes about.

Globally, the drought condition in India is still cause for concern, but the situation has improved as rains began falling in mid-August. There was little changed in the world rice values. Ending stocks are projected at 84.9 million tons, up less than 1%.

September rice futures are currently at $13.35/cwt, down about 50 cents/cwt since compared to yesterday. The November contract is at $13.52/cwt, down about the same amount.

Corn: The old adage that big crops get bigger is holding true this year, so far. This month's *Crop Production* report pegs US national average yield at a record 161.9 bushels per acre. Total production is expected to hit 12.955 billion bushels – second only to the 2007 crop. Despite all the mid-season concern about potential losses on a late crop, yield prospects appear to be exception in many parts of the country, particularly across the western and northern portions of the Corn Belt. To be sure, the crop is still behind schedule developmentally. This week's *Crop Progress* report called just 8% of the crop mature compared with a 5-year average of 23% for this point in the growing season. For the foreseeable future, though, the weather looks benign enough not to be causing the market any concerns, thus the big drop in corn futures over the last couple of weeks as some weather premium was pulled out of prices.

Corn futures opened lower on Friday as traders apparently focused in on the big supply-side numbers from USDA; however, it is important to keep these numbers in context. Part of that context related to pre-report expectations. Yield and production estimates in today's report matched up very with pre-report expectations. Last week's market action, with lower prices on all corn contracts, anticipated the upward revisions to this year's crop. Another thing to consider is the demand-side figures released in Friday's WASDE report. USDA increased their estimate of 2008/09 corn use for ethanol production, pulling down carryover from the previous marketing year. In addition, for 2009/10 USDA increased estimates of feed use, ethanol use, and exports. Total use is projected to reach just over 13 billion bushels. If this projection is realized,

it will mean that corn stocks will decline despite the harvest of the second largest crop on record. In fact, USDA ending stock projection this month comes in at 1.635 billion bushels, up from last month but down from 2008/09 carryover of 1.695 billion bushels. Pre-report estimates generally undershot USDA's number, with the average of pre-report carryover estimates at 1.768 billion bushels. This, along with some reductions in global corn production (notably in South America and China), gives this month's WASDE report at least a slightly friendly tone. Friday's early drop in futures suggests that the market is placing more weight on the immediate reality of a bin-busting crop than on the potential for strong demand sometime down the road.

Soybeans: There were no real surprises for the soybean market in Friday's Crop Production and WASDE reports. Soybean yield was bumped a bit higher this month: up to 42.3 bushels per acre this month compared to last month's estimate of 41.7 bushels. This raised estimated soybean production to 3.245 billion bushels (up from 3.199 last month). Both of these figures were very close to pre-report expectations.

USDA increased total use estimates by 36 million bushels (up 20 on domestic crush, up 15 on exports, up 1 million on residual). The bottom line of this month's adjustments is that expected carryover increases slightly to 220 million bushels (up from last month's estimate of 210 and from last year's carryover of 110). Again, this figure was very close to pre-report expectations and should not have much impact on the market.

2009 Bollworm/Budworm Trap Captures

Ryan Jackson USDA Trap line
September 8, 2009

County	This Week last Year Bollworm	Bollworm	This Week last Year Budworm	Budworm
Washington	25	96	3	6
Sharkey	39	18	0	0
Humphreys	59	97	8	0
Yazoo	6	37	1	8
Holmes	36	164	0	9
Leflore	19	69	5	22
Tallahatchie	82	21	22	2
Coahoma	69	62	26	1
Bolivar	62	201	18	9
Sunflower	47	103	5	7

Fred Musser Trap Line
September 9, 2009

County	Bollworm	Budworm
Grenada	13	2
Hinds	96	5
Madison	103	5
Rankin	20	5
Oktibbeha	51	2
Noxubee	13	3
Lowndes	17	0
Lee	31	1
Prentiss	15	0
Chickasaw	4	0
Calhoun	15	0
Webster	4	0

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