

Agricultural Economic and Policy Perspectives

VOLUME 2, ISSUE 10

OCTOBER 2003

INSIDE THIS ISSUE:

Potential Markets for Biomass Ethanol	1
Pond-Bank Catfish Prices	1
October Crop Production Report	4
Ag Appropriations Update	5

EDITORIAL COMMITTEE:

C.W. (Bill) Herndon, Jr.

Professor
Phone: 662.325.2750
herndon@agecon.msstate.edu

Charlie S. Forrest

Extension Professor
Phone: 662.325.1786
forrest@agecon.msstate.edu

Keith Coble

Associate Professor
Phone: 662.325.6670
coble@agecon.msstate.edu

John D. Anderson

Assistant Extension Professor



Phone: 662.325.1788
anderson@agecon.msstate.edu

Mississippi State University,
United States Department of
Agriculture, Counties
Cooperating.

Mississippi State University
does not discriminate on the
basis of race, color, religion,
sex, age, disability, or veteran
status.



Department of
Agricultural Economics

Potential Markets for Biomass Ethanol

Considerable attention has been paid of late to fuel sources that may serve as a supplement or replacement to fossil fuels. At the same time, many states currently require that oxygenates be added to gasoline in an attempt to reduce carbon monoxide emissions. The primary oxygenate, known commonly as MTBE, is a petroleum derivative. Recent scientific studies have criticized the use of MTBE as an oxygenate because concentrations of MTBE have been found in groundwater, leading to concerns about groundwater contamination.

These developments have added impetus to the call for widespread adoption of ethanol as the replacement for MTBE as a fuel additive. In fact, as of this writing, the current comprehensive energy bill in conference committee in Congress includes a provision for the phase-out of MTBE and use of ethanol as the primary oxygenate in gasoline. While a welcome move to corn growers who supply the bulk of ethanol in the U.S., there are potential pitfalls

with the widespread use of ethanol. Most importantly, ethanol is costly to transport. To prevent separation of the ethanol from gasoline, ethanol must be blended close to time of consumption. At the same time, ethanol cannot be shipped through pipelines effectively. Therefore, transporting ethanol from the corn producing regions of the U.S. to the primary demand areas on the West and East coasts will likely mean high transport costs and higher gasoline costs. Current estimates show that shipping costs for ethanol are around \$1.20 per gallon compared to around \$0.60 per gallon for conventional gasoline.

If the Energy Bill becomes law, there may be a potential market for ethanol that can be produced near gasoline refineries. Biomass ethanol may be the product that can fill the niche created by high transportation costs. Biomass ethanol can be produced from virtually any biological waste product, ranging

(See Biomass Ethanol on page 2)

Which Way Will Pond-Bank Catfish Prices Go?

Pond-bank catfish prices were close to 80 cents a pound in February through June of 2000. Then the price drop occurred, falling to less than 70 cents by December 2000. In 2001, prices hovered around 70 cents for the first four months, but then dropped to 55 cents by December. In 2002 prices increased, reaching a high of 59 cents in July; but they fell again, to 54 cents in December. In early 2003, prices rose to 63 cents a pound by April and then dropped back to 55 cents by July (Figure 1). The question many in the U.S. farm-raised catfish industry are asking is "What will prices do during the remainder of this year, and what about price direction over the next 12 months?"

In a simplistic explanation of price movement, prices can be said to depend on supply and demand interactions for a product. If we assume demand is stable and supply increases, i.e., more fish become available, the pond-bank price would go down; if more fish are available at the processor level then the processed fish product price would go down as well. Conversely, if supply decreases at any one of these points in the production, processing, distribution or retail steps then the price would be expected to increase. On the other side, assume the supply of catfish is stable and demand increases, i.e., there are more fish being consumed than before at similar prices. Then the price of fish should go up, and conversely,

(See Catfish Prices on page 2)

Biomass Ethanol

(Continued from page 1)

from cotton gin trash to wood waste. Therefore, biomass ethanol can be produced locally (near refineries) with local biological waste, lowering transport costs. However, biomass ethanol is more expensive to produce than corn-based ethanol. Therefore, the viability of biomass ethanol production depends on the production cost difference versus the transportation cost difference compared to corn-based ethanol. Thus, biomass ethanol production is likely to be concentrated in areas away from the Corn Belt.

The appealing feature of biomass ethanol from an agricultural perspective is that it may be a way for producers to improve profitability by adding revenue for byproducts that were previously waste. However, the current high cost of production for biomass ethanol likely means that these benefits are going to accrue to producers closer to gasoline refineries. Research is currently underway to develop technologies and techniques that will lower this production cost, thus expanding the benefits of biomass ethanol to a greater number of producers. However, until production costs are lowered to the point that biomass ethanol is competitive with corn-based ethanol, potential benefits to agricultural producers will be limited.

For a complete report on biomass ethanol markets, see: http://agecon.lib.umn.edu/cgi-bin/pdf_view.pl?paperid=11158

Darren Hudson 662.325.7998
Lanier Nalley 662.325.2676

Catfish Prices

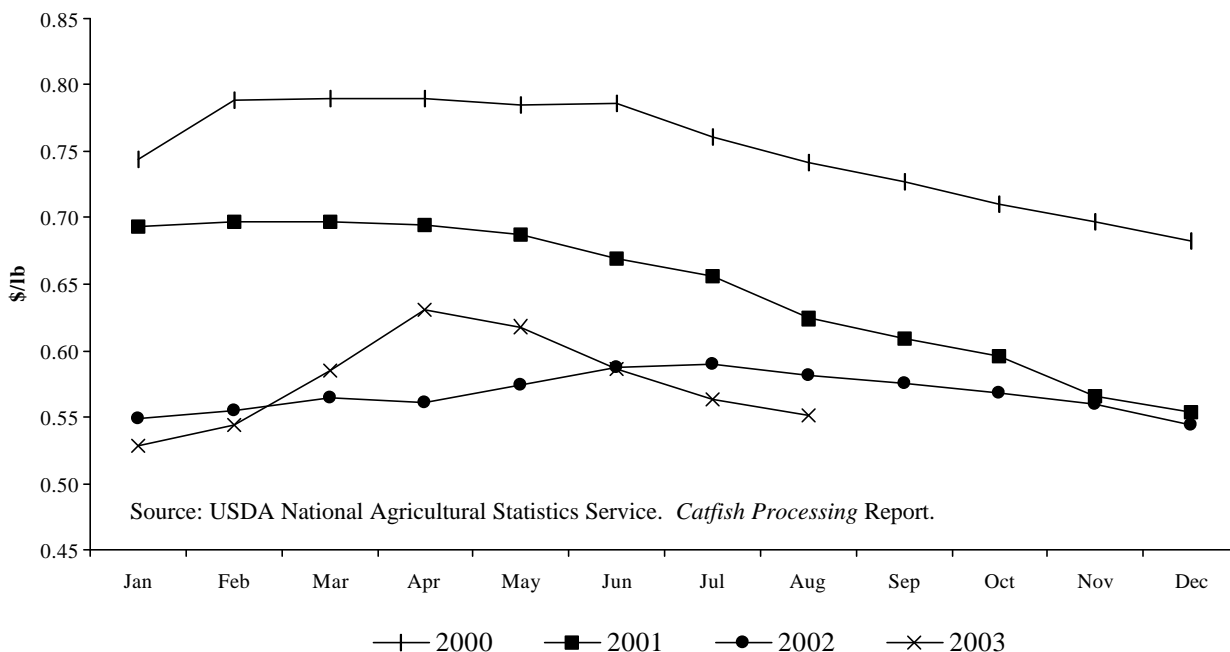
(Continued from page 1)

if demand decreases (i.e., there would be less fish consumed than before at similar prices) then the price of fish should go down. Let's look at some factors that influence supply and demand to see how recent economic and production information may affect catfish pond-bank price movements.

First, on the consumer demand side there are four recent economic indicators that show mixed effects for catfish sales and consumption. Recently, the Bureau of Economic Analysis released a report indicating that U.S. gross domestic product rose by an annual rate of 3.1% during the second quarter of 2003. Personal consumption was a major contributor to the increase. This is positive news for the economy and should bode well for catfish sales and consumption. However, another recent economic indicator showed manufacturing output to be up, but employment numbers dropped, signifying increased productivity but no new jobs. While it is not clearly linked one would expect that no new jobs would likely lead to stagnant or declining catfish consumption. Finally, perhaps the most important indicator is restaurant sales. The U.S. Census Bureau of the Department of Commerce announced September 12 that advance estimates of U.S. retail and food services sales for August were \$319.2 billion, an increase of 0.6 percent ($\pm 0.9\%$) from the previous month and up 5.4 percent ($\pm 1.0\%$) from August 2002. Total sales for the June through August 2003 period were up 5.3 percent ($\pm 0.5\%$) from the same period a year ago. The June to July 2003 percent change was revised from +1.4 percent ($\pm 0.9\%$) to +1.3 percent ($\pm 0.3\%$). This is definitely good news as this translates to more fish consumption and

(See Catfish Prices on page 3)

Figure 1. Catfish Prices Paid to Producers: 2000—2003



Catfish Prices

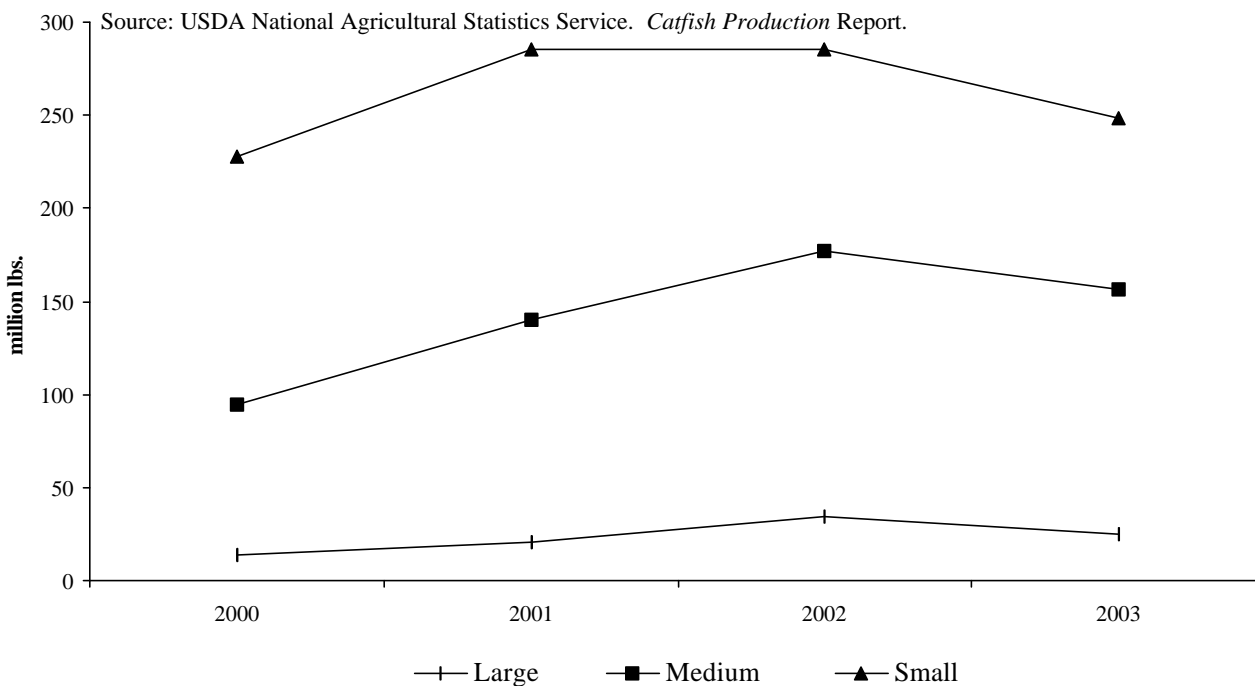
(Continued from page 2),

more fish being sold in restaurants. Without conducting an in-depth analysis, the summed magnitude and overall direction of the impact of these supply and demand factors on pond bank catfish prices is difficult to know, but the overall consumer demand movement seems to be positive, but like the economy in general there is still some uncertainty.

The USDA National Agricultural Statistics Service’s (NASS) most recent monthly *Catfish Processing Report* shows an increase of 3 to 11 percent in processed catfish quantities for January through July of 2003, as compared to the same months for 2002. There is an exception for August 2003, which saw approximately the same quantity processed in 2002 and 2003. The increase in consumption for 2003 occurred at prices very similar to those in 2002, indicating an increase in demand. Even accounting for U.S. population increases, the quantity of catfish demanded continues to in-

reported a 6% decrease in catfish farms and a 10% decrease in food fish pond inventories from a year ago. These tough times of prolonged low prices have caused 55 catfish farms to cease operations in the four major producing states of Alabama, Arkansas, Louisiana, and Mississippi. In fact, the trend in small, medium, and large food-size catfish inventory was down in July 2003 compared to July 2002 and 2001 (Figure 2). This report also showed large and small stocker inventories to be down from January 2003 (except for large stocker inventories in Alabama). In-pond fingerling inventories were trending down from July 2002 levels, as were broodfish inventories. Normally, decreases in inventories are a precursor to decreases in the supply of harvestable-size fish to processors, and, consequently, in value-added products to the distribution and sales outlets further along the marketing chain. Inventories of varying fish sizes will have varying time lags before harvest and processing, but decreases in all in-pond sizes indicate that fish production will be lower next year.

Figure 2. Four-State Foodsize Catfish Inventory: 2000—2003*



*The four states included in this inventory report are Alabama, Arkansas, Louisiana, and Mississippi.

crease. According to basic supply and demand principles, this demand increase should lead to a price increase at the pond bank and processor levels. But, according the latest NASS figures, the pond bank catfish price dropped again in August by \$0.012 a pound. Why this is occurring is not an easy question to answer. While it involves many factors, the recently released NASS *Catfish Production Report* may shed some light on the supply side of the equation and its effect on the direction of pond-bank prices.

The semi-annual NASS *Catfish Production Report* (July)

Another factor effectively decreasing supply of catfish to consumers comes from the Department of Commerce and the International Trade Commission’s finding that tra and basa fish have been illegally dumped into the U.S. market at below fair market value. Tariffs ranging from 37% to 64% have been placed on these imported fish. The tariffs will increase the cost of production for these fish and increased costs means reduced profit margins so production and exports to the U.S. should decline. Vietnamese officials have estimated that tra and basa exports to the U.S. are expected to drop

(See Catfish Prices on page 4)

Catfish Prices

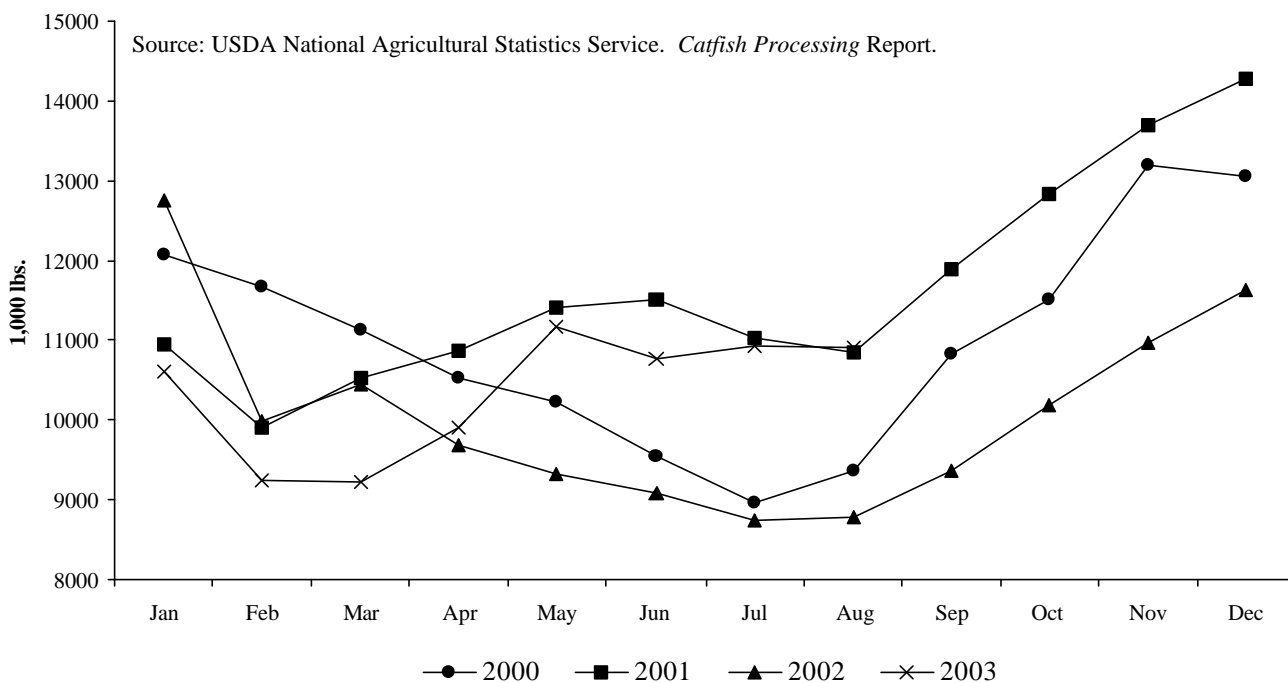
(Continued from page 3)

64%, from \$55 million to \$20 million in 2003.

From the lower fish inventory data, the case for a reduced fish supply to processors is strong from now until next year. Lowered imports of tra and basa will also decrease the supply available to wholesalers and retail outlets. These supply reductions should eventually cause pond-bank prices to increase. However, reduced supply will increase prices but only as long as quantities remain at a lower volume. (In the long term there is a critical need for product promotion to increase consumer demand for U.S. farm-raised catfish product so increased production can be sustained at a higher price level).

the rest of the year, then processor inventories should increase from now until the end of the year. But where will processors get their fish? They will obtain fish from producers who have already been shown by NASS to have reduced harvest-sized stocks of catfish on hand. Thus, the restricted supply and increased demand by processors should push the pond-bank prices up. Unfortunately, there is one glitch—some 55 farms representing 8,300 acres of food-size production went out of business in the last year. Bank foreclosures have occurred, and banks are not in the business of growing fish; they do not want to hold catfish farms or their inventories for too long. Banks prefer to sell the fish inventories quickly, even if it means receiving a low price. Thus, this “glut” of fish may keep prices from rising until the many foreclosed farms’ fish run through the processing and marketing systems.

Figure 3. Total Processor Inventories of Frozen Catfish Products: 2000-2003



Another important aspect of supply is the total inventory of frozen catfish. In order to formulate accurate price forecasts, it would be useful to have data on inventories of frozen catfish in the freezers of processing plants, wholesalers, distributors and retailers. While public data are not available for the latter three business categories, catfish processor inventories are supplied by the monthly NASS *Catfish Processing Report*. Processor frozen catfish fillet inventories follow a seasonal pattern with lower quantities held during the first half of the year and increased holding during the second half of the year (Figure 3). Will this be the case in 2003? The 2003 pattern of processor inventories of frozen catfish products has roughly followed the 2001 pattern. Regardless of the year, if history can be counted on to predict

The good news is that pond-bank prices should be going up, but the bittersweet questions of when and by how much are critical to the future of many cash-strapped farms. A supply and demand model estimated for the catfish industry in the late 1980s concluded that there could be as long as an 18-month lag in price changes from changes in quantities. The catfish industry has changed much since then and this time lag may not be appropriate for the present, but may give us an idea of the longest time period we might expect for a re-establishment of a new and higher equilibrium price.

Terry Hanson 662.325.7988



October Crop Production

In an excerpt from the Wall Street Journal, Michael Swanson, an agricultural economist at the banking firm Wells Fargo & Co. commented, "How good the farm economy is depends now on where you are situated." This statement has already been proven valid as American farmers are experiencing record high beef prices due to the BSE scare in Canada. This statement could also be applied to Mississippi row crop farmers. If the USDA's *October Crop Production* report is accurate, Mississippi's farmers should enjoy strong yields for soybeans, corn, and cotton.

The *October Crop Production* report estimated a 10% decrease in soybean production, nationally, from 2002. This would be the lowest production since 1996. The decrease in production is attributed to high temperatures and moisture shortages in the Great Plains and western Corn Belt. However, production in the Delta improved from 2002, largely due to favorable weather conditions during the growing season and, so far, during harvest. The October crop report forecasts a 15% increase in Mississippi soybean production and a record high yield of 36 bushels per acre.

Nationally, cotton production is forecast to be 2% above 2002 levels, and harvested cotton acres are expected to total 12.1 million acres. Compared to September forecasts, yield prospects have improved in all major producing states with the exception of Texas. For Mississippi, cotton production is forecast to reach 2.1 million bales, an 8% increase from 2002. Per-acre yield is forecast at 916 pounds, an increase of 108 pounds from 2002 and an increase of 43 pounds over the September estimate.

National corn production is expected to be 13% above 2002 levels. Corn yield is forecast to be 12 bushels per acre more than last year's yield. If these forecasts are realized, production and yield could be the second largest on record. Yields are expected to be down in much of the Great Plains and northern Corn Belt but up in many Southeastern states due to favorable growing conditions. For Mississippi, corn for grain production is forecast to reach a record level of 68.9 million bushels or 130 bushels per acre. Harvested acreage for grain is estimated to remain the same as 2002.

Although Midwestern farmers are facing smaller yields and lower incomes this season, Mississippi farmers could be facing just the opposite. Particularly with respect to soybeans smaller Midwestern yields have led to a major rally in prices. With Mississippi farmers experiencing larger yields than in 2002, Mississippi farmers are finding themselves to be the beneficiaries of the Midwestern drought. With increased prices for most major crops compared to 2002 and with increased yields on virtually all crops, Mississippi farmers are likely to see higher revenues this year than in 2002.

Meredith Broyles 662.325.9560
Corey Miller 662.325.0848

No Movement on Ag Appropriations

As noted in last month's *Perspectives*, the FY2004 agricultural appropriations bill would not go before the full U.S. Senate until Congress returned from its summer recess. As of October 1, however, the Senate has yet to take up this appropriations bill. In fact, Congress has only passed three appropriations measures: Defense, Homeland Security, and the Legislative Branch. Therefore, since FY2003 ended on September 30, Congress passed a continuing resolution to fund the rest of the federal government not covered by these three appropriations bills. The continuing resolution will fund the federal government as in FY2003 until October 31.

The delay in appropriations bills becoming law is neither surprising or new. In FY1999, FY2000, FY2001, and FY2002, the omnibus spending bills were not signed into law until October and November, respectively, and the latter two in December. FY2003 appropriations were not fully implemented until February of 2003.

Earmarking funds for the rebuilding of Iraq will keep the Senate busy for some time. The FY2004 Emergency Supplemental spending bill proposed by the President totals \$87 billion, which also includes funds for continued reconstruction in Afghanistan. Tense debate, predictably, is expected on this bill.

The Senate has already spent considerable time debating FY2004 District of Columbia appropriations, which have become controversial due to provisions that would include school vouchers for the District. Hence, even the expeditious handling of the emergency appropriations for Iraq may not clear the way for the Senate to take action on agriculture and other appropriations bills by the time the continuing resolution expires at the end of this month.

Once the full Senate begins work on agriculture spending for FY2004, *Perspectives* will follow the developments and report the outcome in future issues. The bill approved by the full Senate, however, must still go to a conference committee to be reconciled with the House version, after which the conference report must be approved by both chambers before heading to the President's desk. The agriculture appropriations bill for FY2004 may prove to be much different from FY2003, as the actions of the full House and the Senate Appropriations Committee have indicated budgets for agriculture could be shrinking.

Corey Miller 662.325.0848



If you would like to receive *Agricultural Economic & Policy Perspectives* in electronic format, please notify John Anderson by e-mail at anderson@agecon.msstate.edu or by phone at 662.325.1788.



Upcoming Events

Forest Investment Analysis Short Course

October 6, 13, 20

MSU Homecoming

October 11
Starkville, MS

Ext. Secretarial Enhancement Class

October 14
Starkville, MS

Fortune 5 Barrel Race

October 17

Prairie Research Unit Open House

October 18
Prairie, MS

Timber Tax Fundamentals Short Course

October 18
Eupora, MS

Oktoc Stampede Pro Rodeo

October 24

Forest/Wildlife Mgmt. Short Course

October 28

USDA Reports Calendar

October 3

Dairy Products Prices
Poultry Slaughter
Dairy Products

October 6

Crop Progress

October 10

Cotton Ginnings
Crop Production

October 17

Cattle on Feed
Milk Production

October 20

Cold Storage

October 22

Catfish Processing

October 24

Livestock Slaughter
Monthly Agnews

October 28

Weather-Crop Summary

October 30

Rice Stocks
Peanut Stocks and Processing

October 31

Agricultural Prices

<http://www.agecon.msstate.edu/compolicy>

RETURN SERVICE REQUESTED

PENALTY FOR PRIVATE USE, \$300

OFFICIAL BUSINESS

MISSISSIPPI STATE, MISSISSIPPI 39762-5446

P.O. BOX 5446

MISSISSIPPI STATE UNIVERSITY

U.S. DEPARTMENT OF AGRICULTURE

COOPERATIVE EXTENSION SERVICE