The University of Georgia

Center for Agribusiness and Economic Development

College of Agricultural and Environmental Sciences

Georgia Economic Losses Due to 2007 Drought

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Executive Summary

Drought conditions that have persisted throughout 2007 have caused losses of $787.2 million in production losses. Greatest values of loss are reported for hay and pasture, cotton, peanuts, and corn. Pasture losses are $264.7 million of grass for grazing. Hay losses of $83.8 million are 59% of normal production value. Production value losses for cotton are $160.1 million which is 33% of normal. Losses for the peanut crop are $92.5 million, or 28% of normal production value. Corn losses of $63.1 million are 88% of the normal production value. Drought conditions are estimated to have a total economic output impact $1.3 billion in losses.

Georgia Economic Losses Due To 2007 Drought

Drought conditions that have persisted throughout the 2007 production period have affected Georgia agriculture. Greatest losses were to hay and pasture fields that have diminished grass for grazing and hay cutting. The Center for Agribusiness and Economic Development (CAED) at The University of Georgia estimates total agricultural production value losses are $787.2 million. Losses do not include 10 counties that deferred reporting until a later date. In addition, 6 counties reported losses, but deferred reporting on specified commodities.

Table 1 shows agricultural commodity totals for production value losses. Greatest values of loss are reported for hay and pasture, cotton, peanuts, and corn. Pasture losses are $264.7 million of grass for grazing. Hay losses of $83.8 million are 59% of normal production value. Production value losses for cotton are $160.1 million which is 33% of normal. Losses for the peanut crop are $92.5 million, or 28% of normal production value. Corn losses of $63.1 million are 88% of the normal production value. The balance of production value losses are for pecans, tobacco, fruits, and soybeans.

Total state losses for commodities are compared to normal production values for commodities with reported losses in Table 1. Total losses for reported commodities are greater than 70% of normal production value for hay, pasture, tomatoes, and blueberries. Total state losses are 50% of normal value for commodities with reported losses.

Economic Impacts of Production Losses

Losses reported in Table 1 are for values of production losses. These losses lead to additional losses as typical economic multiplier effects are not realized in the Georgia economy. Output losses are the total sales that are lost to the Georgia economy due to the direct losses reported for each commodity in Table 2. Direct losses for a combination of hay and pasture total $348.5 million and lead to total output losses of $586.1 million. Direct losses for cotton cause total output impact loss of $264.8 million. Drought conditions are estimated to have total output impact losses of $1.3 billion.

Output losses lead to declining incomes for workers in commodity production industries, as well as those who earn income due to agricultural production. Income losses are the best indicator of lost wealth to the Georgia economy due to drought conditions. Labor income impacts in Table 3 show the income losses for proprietors and employees. Total income losses in Georgia are estimated at $471.1 million. Employment impacts in Table 3 represent the number of full-time and part-time jobs that are associated with income losses. A total of 14,046 jobs are impacted by drought conditions in agriculture.

Table 1. Losses Due to Drought, by Commodity

	Loss $	3 Year Average Value	Percent Average	[1]Normal Value $	[1]Percent, Normal Value
Cotton	160,124,725	478,739,333	33.4	397,438,126	40
Peanuts	92,476,625	328,724,000	28.1	257,276,140	36
Soybeans	6,326,543	30,128,667	21.0	16,932,285	37
Corn	63,134,072	71,477,000	88.3	131,312,314	48
Sorghum	363,962	2,546,000	14.3	814,355	45
Wheat	9,437,538	24,243,333	38.9	22,276,543	42
Rye	734,369	2,746,667	26.7	1,170,784	63
Oats	734,498	2,355,333	31.2	1,985,048	37
Tobacco	32,028,696	56,280,667	56.9	81,180,880	39
Hay	83,777,859	143,289,568	58.5	117,323,281	71
Pasture	264,728,167	NA	NA	368,965,449	72
Cucumbers	320,710	55,845,333	0.6	801,798	40
Watermelons	8,508,592	40,853,333	20.8	24,034,736	35
Tomatoes	5,431,395	65,700,000	8.3	7,368,978	74
Sweet Corn	2,795,598	65,601,333	4.3	16,224,141	17
Peas	343,538	8,846,438	3.9	881,972	39
Snap Beans	424,043	27,737,667	1.5	3,108,936	14
Butter Beans	14,500	NA	NA	41,828	35
Peppers, Bell	1,326,089	22,920,000	5.8	3,315,138	40
Cantaloupes	2,625,893	18,351,667	14.3	6,797,266	39
Squash	609,767	41,224,667	1.5	1,524,478	40
Pumpkins	137,813	NA	NA	275,625	50
Pecans	35,599,923	75,673,333	47.0	90,862,857	39
Peaches	13,555,859	31,171,000	43.5	33,744,933	40
Blueberries	278,533	38,455,000	0.7	281,373	99
Grapes	712,352	4,088,000	17.4	1,867,517	38
Other Fruit	47,549	NA	NA	125,130	38
Other	599,233	NA	NA	764,437	78
Total[2]	**787,198,441**			**1,588,696,348**	50

[1]Normal based only on counties reporting losses.

[2]10 counties deferred reporting, 6 counties deferred specified commodities.

Table 2. Economic Output Impacts Due to Drought

	Direct Loss	Output Impact
	-dollars-	
Grains, Soybeans	80,730,982	135,852,089
Tobacco	32,028,696	55,388,257
Hay/Pasture	348,506,026	586,113,614
Vegetables/Melons	22,537,938	39,153,823
Pecans	35,599,923	60,072,396
Fruits	14,594,293	23,933,145
Cotton	160,124,725	264,780,100
Peanuts	92,476,625	155,526,183
Other	599,233	985,131
Total Losses	**787,198,441**	**1,321,804,738**

Table 3. Employment and Labor Income Impacts

	Employment	Labor Income
	-jobs-	*-dollars-*
Grains, Soybeans	2,585	48,192,688
Tobacco	1,068	24,398,721
Hay/Pasture	5,056	213,908,864
Vegetables/Melons	356	18,323,925
Pecans	644	25,372,128
Fruits	336	9,059,170
Cotton	2,630	74,971,158
Peanuts	1,342	56,761,060
Other	29	147,517
Total Losses	**14,046**	**471,135,231**

Geographical Distribution of Losses

Total losses in Figure 1 are spread throughout Georgia with the largest concentration of losses occurring in the southwestern portion of the state. Figure 2 shows hay and pasture losses in all regions, but northern counties have the greatest concentration of losses. Figures 3-5 indicate that southern counties have the greatest losses for cotton, peanuts, and corn. Concentrations of losses are in southwestern counties with greatest acreages of these crops.

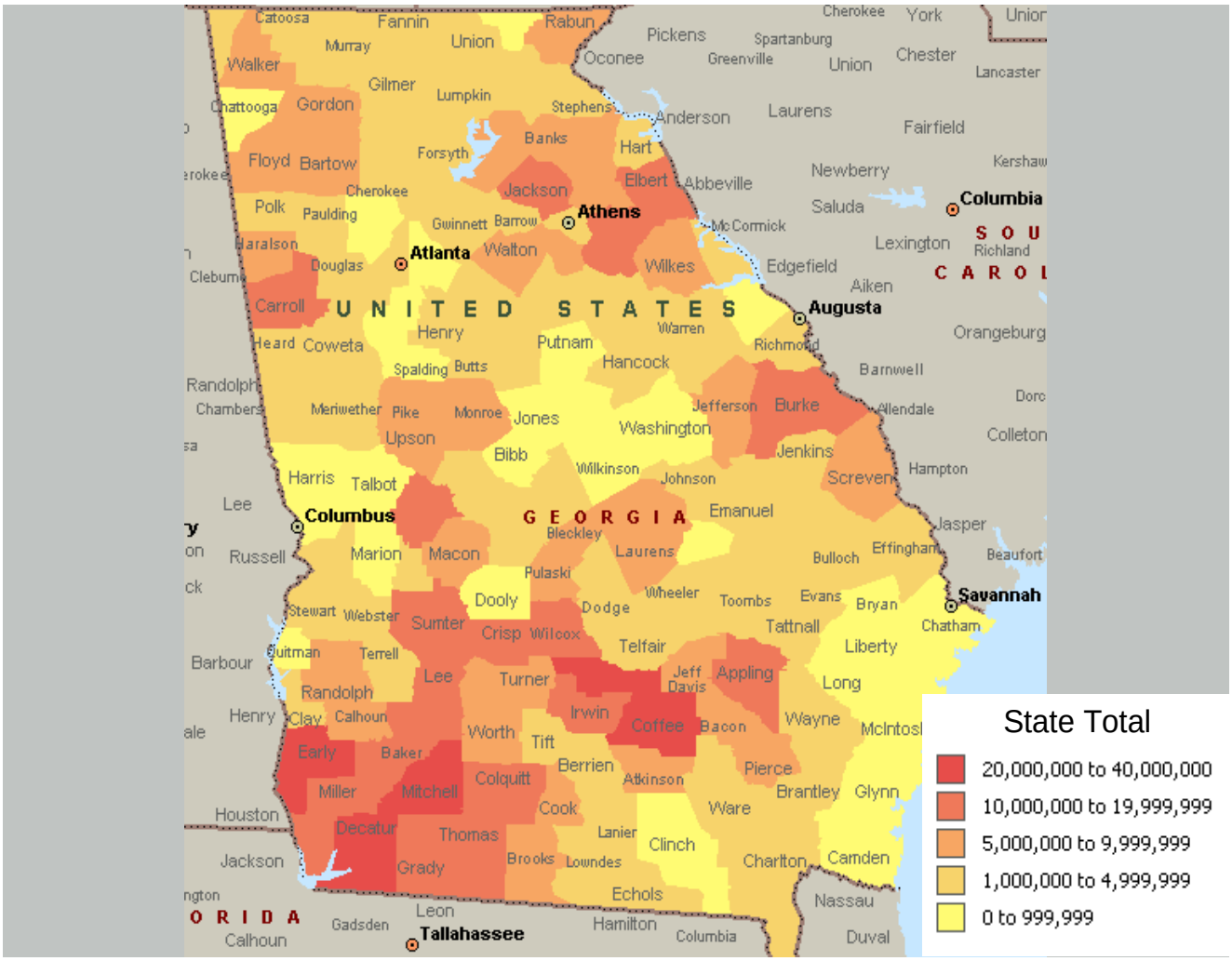

Figure 1. Total Losses ($)

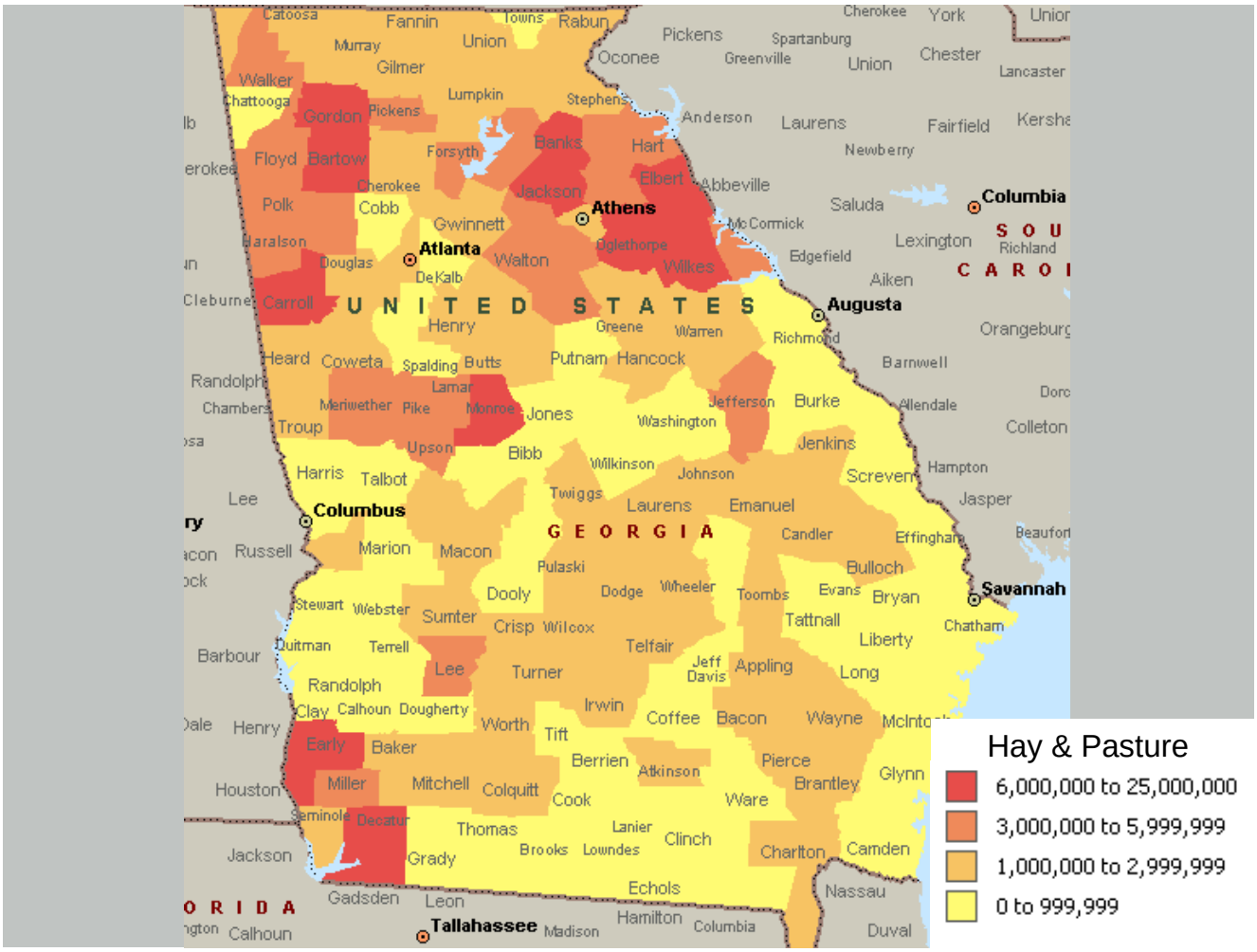

Figure 2. Hay & Pasture Losses ($)

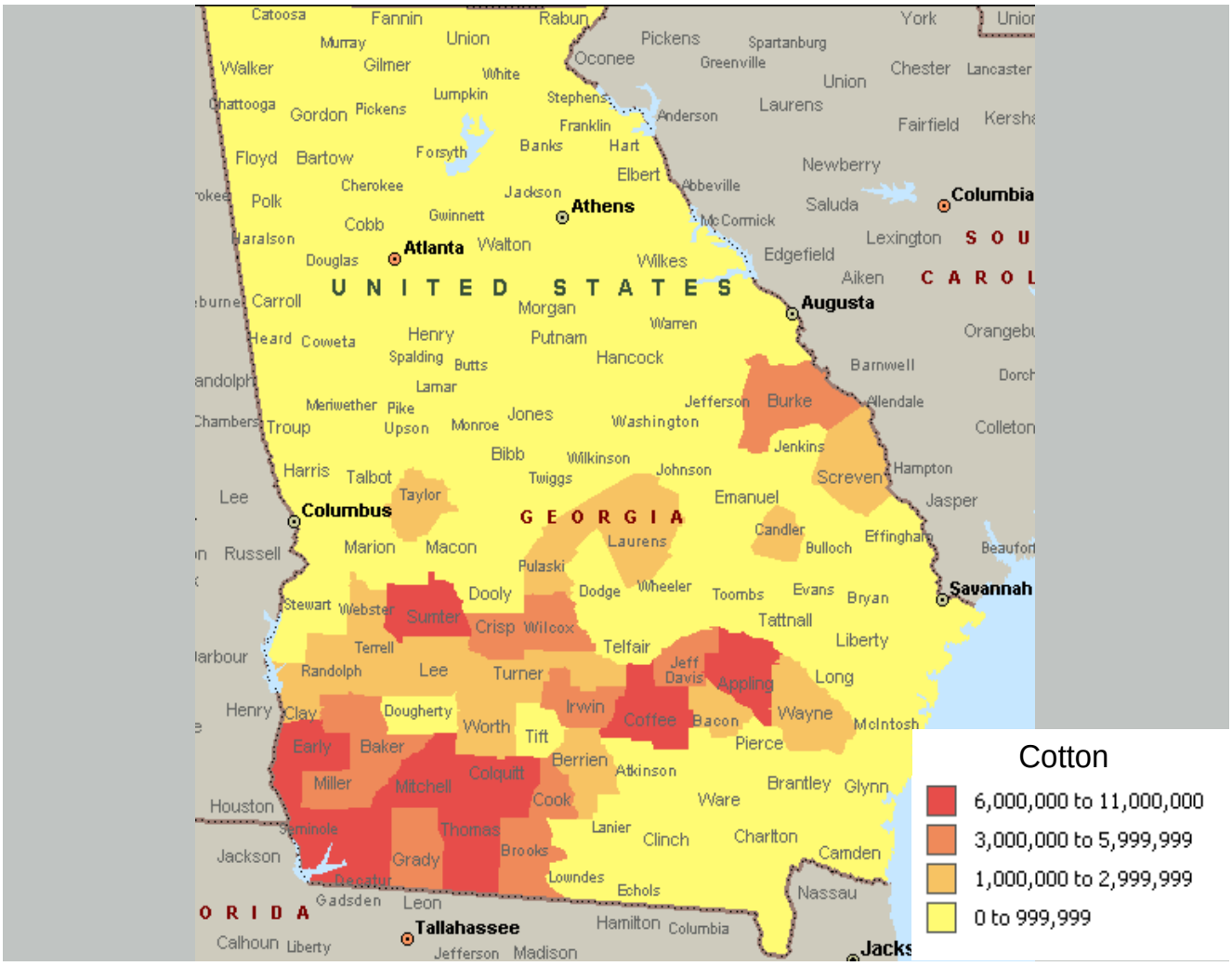

Figure 3. Cotton Losses ($)

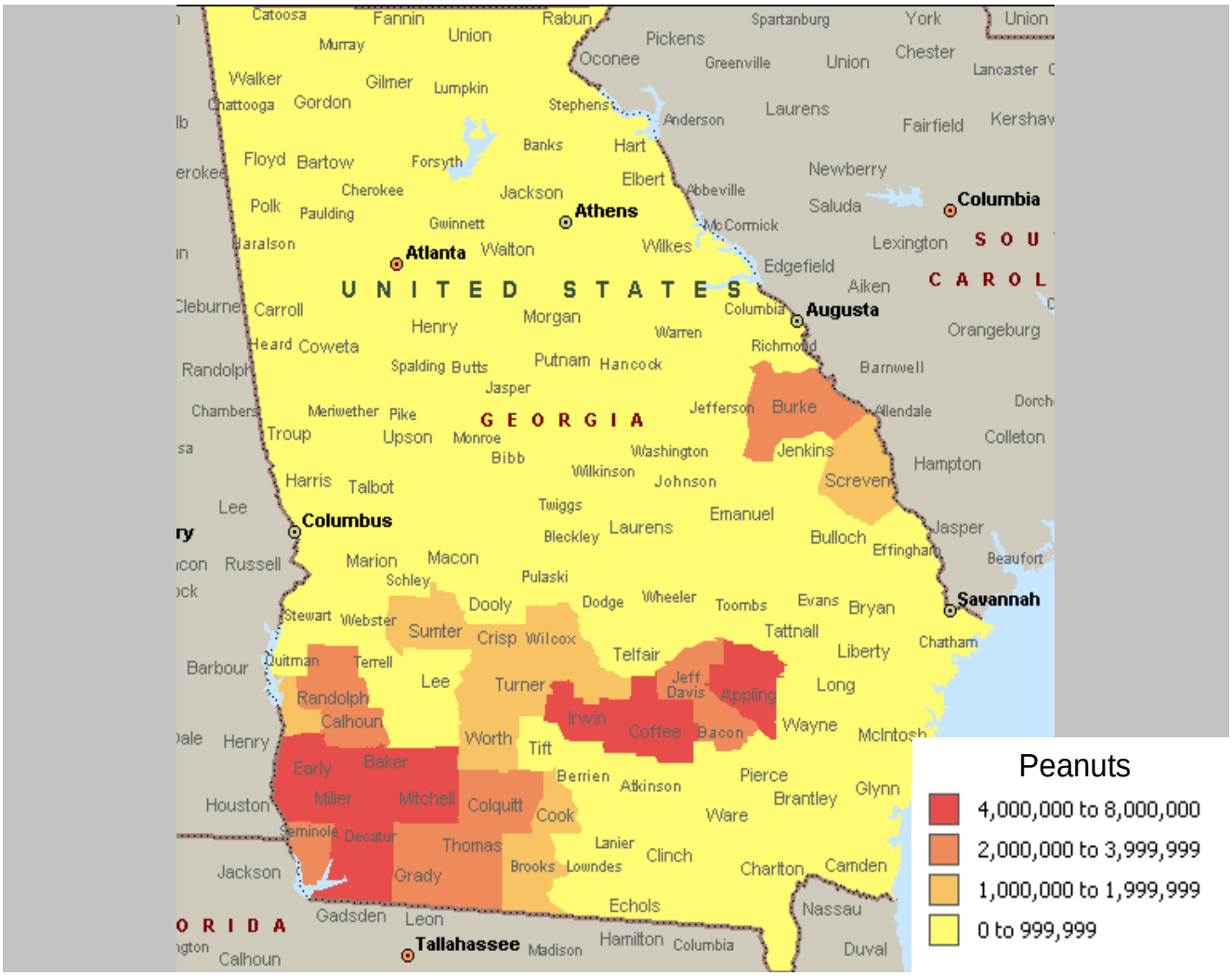

Figure 4. Peanut Losses ($)

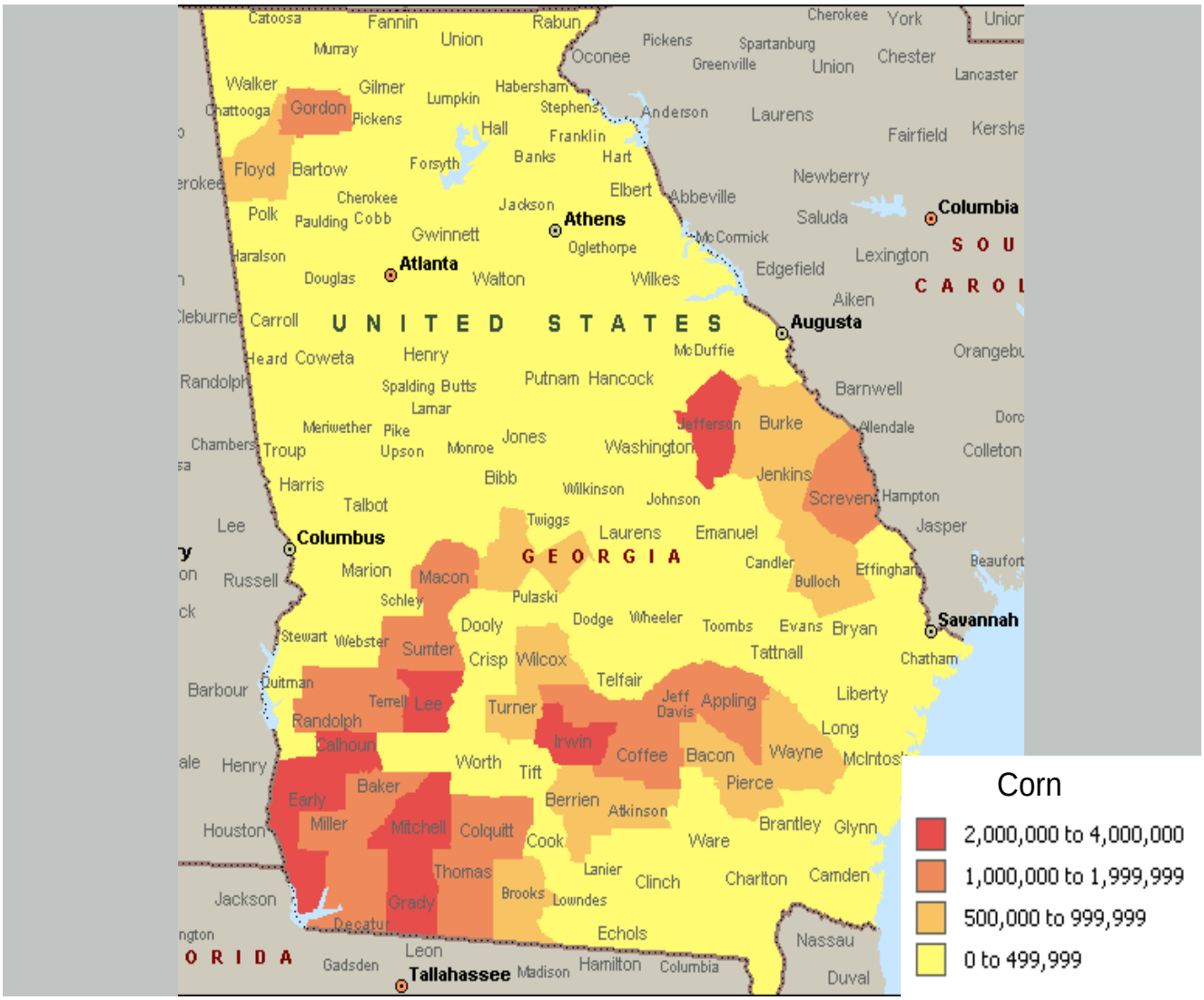

Figure 5. Corn Losses ($)

The Center for Agribusiness & Economic Development

The Center for Agribusiness and Economic Development is a unit of the College of Agricultural and Environmental Sciences of the University of Georgia, combining the missions of research and extension. The Center has among its objectives:

> To provide feasibility and other short term studies for current or potential Georgia agribusiness firms and/or emerging food and fiber industries.
>
> To provide agricultural, natural resource, and demographic data for private and public decision makers.

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J. Scott Angle, Dean and Director