

**INCLUDED IN THIS ISSUE**

Crop Weather ERS

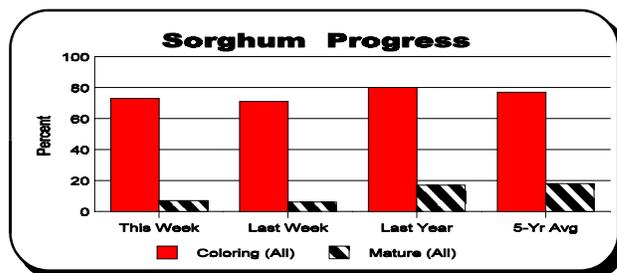
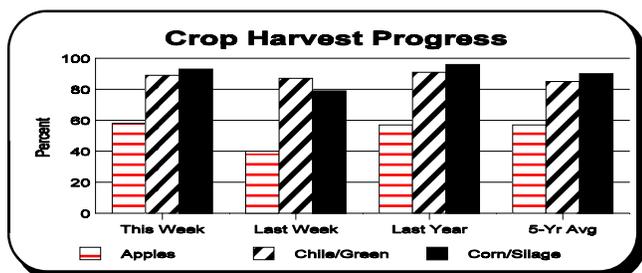
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**CROP SUMMARY FOR THE WEEK ENDING SEPTEMBER 28, 2003**

**NEW MEXICO:** There were 6.9 days suitable for field work. Wind damage was 13% light and 7% moderate. With the night time temperatures dropping, growth on alfalfa will be limited. Insect activity has slowed down some since the lower temperatures have set in during the night. Farmers spent the week finishing up the green chile harvest, beginning the peanut harvest, and getting some last clippings from their hay fields. Alfalfa conditions were 12% very poor, 11% poor, 33% fair, 39% good, and 5% excellent. The 5<sup>th</sup> cutting progressed slowly, inching along but sticking with the five year average at 90% complete, while the 6<sup>th</sup> was 37% complete and the 7<sup>th</sup> cutting was 2% complete. Cotton remains in mostly fair to good condition, with 79% of the bolls opening and the harvest not too far off. Corn was reported as mostly fair to excellent, while 94% of the crop was mature which is close to last year's progress. Corn harvested for silage was 93% complete with the grain harvest 3% complete. Total sorghum conditions improved slightly but remained in mostly very poor to good and 73% was coloring. Total wheat took a big jump and was 80% planted and 55% emerged. Wheat conditions were reported as 28% very poor, 19% poor, 29% fair, 17% good, and 7% excellent. Peanuts were in fair to good condition with just 4% of the crop harvested. Chile was listed as mostly fair to good with 89% of the green chile harvested and 7% of the red chile harvested. Onions were reported as 24% planted. Apples were 58% harvested and conditions were listed as 25% very poor, 41% poor, 17% fair, and 17% good. Ranchers were busy this week hauling water, shipping cattle, and making decisions about winter grazing. Cattle conditions were reported to be 8% very poor, 17% poor, 46% fair, 14% good, and 15% excellent. Sheep conditions were 16% very poor, 23% poor, 26% fair, 29% good, and 6% excellent. Range and pasture conditions were reported as 48% very poor, 31% poor, 20% fair, and 1% good.

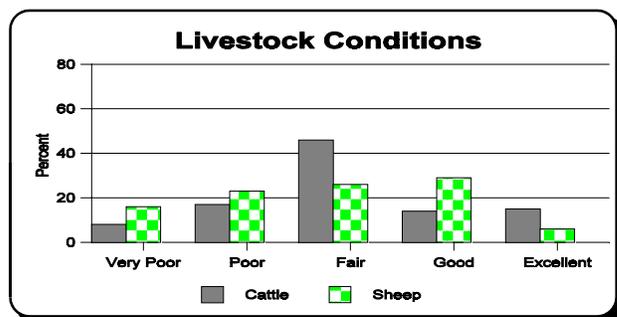
**CROP PROGRESS PERCENTAGES WITH COMPARISONS**

CROP PROGRESS		This Week	Last Week	Last Year	5-Year Average
APPLES	Harvested	58	40	57	57
CHILE	Harvested-Green	89	87	91	85
CORN	Harvested-Silage	93	79	96	90
COTTON	Opening Bolls	79	70	72	74
ONIONS	Planted	24	NA	17	20
SORGHUM (All)	Coloring	73	71	80	77
SORGHUM (All)	Mature	7	6	17	18
WHEAT (All)	Emerged	55	36	62	50
WHEAT (All)	Planted	80	66	85	75



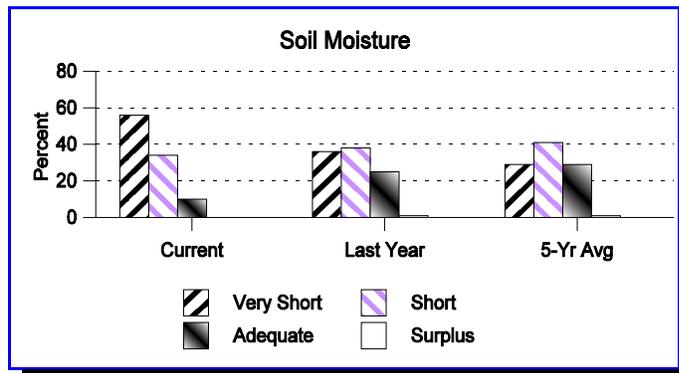
**CROP AND LIVESTOCK CONDITION PERCENTAGES**

	Very Poor	Poor	Fair	Good	Excellent
Alfalfa	12	11	33	39	5
Chile	3	7	23	52	15
Corn	--	2	32	40	26
Cotton	1	8	51	33	7
Lettuce	--	--	10	61	29
Peanuts	--	1	71	27	1
Pecans	1	1	25	51	22
Sorghum (All)	24	35	19	20	2
Wheat (All)	28	19	29	17	7
Cattle	8	17	46	14	15
Sheep	16	23	26	29	6
Range/Pasture	48	31	20	1	--



**SOIL MOISTURE PERCENTAGES**

	Very Short	Short	Adequate	Surplus
Northwest	43	52	5	--
Northeast	47	48	5	--
Southwest	79	18	3	--
Southeast	56	23	21	--
State	56	34	10	--
State-Last Year	36	38	25	1
State-5-Yr Avg.	29	41	29	1



**WEATHER SUMMARY**

Temperatures for the week were generally above average - by 3 to 6 degrees across the west and by about 1 to 3 degrees across the east where two cold frontal passages resulted in more variable temperatures. Precipitation was limited to the southwest early in the week due to the remnants of the tropical system Marty, and to the east later in the work week due to the frontal passages. For most of northern and central New Mexico dry conditions were reported. Data estimated for Tatum. Data incomplete for Silver City, Ruidoso, and Socorro.

**NEW MEXICO WEATHER CONDITIONS SEPTEMBER 22 - 28, 2003**

Station	Temperature			Precipitation				
	Mean	Maximum	Minimum	09/22 09/28	09/01 09/28	Normal Sep	01/01 09/28	Normal Jan-Sep
Carlsbad	73.1	92	54	0.35	0.54	2.75	4.71	10.74
Tatum	68.9	92	48	0.01	0.39	2.36	5.42	13.53
Roswell	72.5	93	50	T	0.00	1.87	2.65	10.64
Clayton	65.5	91	45	0.01	0.39	1.77	10.06	13.38
Clovis	68.7	90	53	0.00	1.85	2.16	11.29	14.90
Roy	65.0	82	48	0.00	0.89	1.90	5.32	13.74
Tucumcari	69.6	91	51	0.01	0.49	1.47	12.01	12.45
Chama	54.9	82	27	0.00	3.04	2.23	14.29	16.13
Johnson Ranch	59.7	83	32	0.00	1.29	1.33	6.62	9.05
Capulin	59.4	89	32	0.00	0.65	2.22	10.85	15.30
Las Vegas	61.0	84	38	0.00	1.31	2.07	5.19	14.85
Los Alamos	63.2	80	44	0.00	0.55	2.12	7.49	15.30
Raton	60.4	87	39	0.00	0.97	1.61	8.88	14.64
Santa Fe	63.1	84	38	0.00	0.76	1.51	4.91	11.54
Red River	51.6	74	27	0.00	5.50	1.66	18.99	16.69
Farmington	66.6	88	43	0.00	1.03	0.97	3.85	6.33
Gallup	61.4	87	32	0.00	1.12	1.31	6.03	9.67
Grants	62.2	87	34	0.00	0.81	1.56	4.41	8.51
Silver City	68.0	87	50	0.00	0.22	2.22	4.25	12.86
Quemado	60.5	84	31	0.00	0.96	1.73	7.53	11.41
Albuquerque	71.4	89	54	0.00	0.24	1.00	4.12	7.06
Carrizozo	67.5	88	45	0.00	0.39	1.88	6.63	10.12
Gran Quivera	65.4	84	43	0.00	0.90	1.95	5.51	12.74
Moriarty	61.7	88	35	0.00	0.64	1.61	4.95	10.67
Ruidoso	61.5	81	39	0.00	0.50	2.50	9.95	17.53
Socorro	68.1	88	44	0.00	0.38	1.53	2.39	7.37
Alamogordo	74.8	93	55	0.00	0.12	1.99	3.86	9.91
Animas	74.5	95	57	0.02	0.09	1.68	2.02	8.76
Deming	74.6	93	53	0.02	0.08	1.63	3.73	8.11
T or C	73.4	91	54	0.03	0.70	1.08	3.23	7.67
Las Cruces	74.6	95	52	0.00	0.23	1.36	5.27	7.28

(T) Trace (-) No Report (\*) Correction

All reports based on preliminary data. Precipitation data corrected monthly from official observation forms.

## Production Costs Critical to Farming Decisions

Policymakers and producers grow nervous when commodity prices dip, as they did during 1998-2001. Weather, breeding cycles, world stocks, and consumption swings can all make for uncertain farm income, and a surefire buffer against fluctuations is impossible. However, farmers make a host of decisions that can predispose them to weathering out rough patches. Farmers make daily decisions about input use, seasonal decisions about what to plant, annual decisions about farmland rental, and multi-year decisions about ownership and upkeep of land, machinery, and facilities. Farmers' decisions affect agricultural production, prices, and costs; the quality of the environment; the demographics of rural areas; and more. Farmers' decisions, in turn, are affected by how production costs compare with expected returns and non-monetary benefits (such as a rural lifestyle) and by the characteristics of the farm (such as type, size, specialization, and location) and farm operator (age, education, and off-farm employment).

Analysts can evaluate such decisions to identify perennially high-cost and low-cost producers and thereby anticipate industry trends. Based on information from the annual Agricultural Resource Management Survey (ARMS), this article examines the extent to which U.S. producers are covering costs and why costs vary among farms.

### The Agricultural Resource Management Survey (ARMS)

The ARMS is USDA's primary vehicle for data collection on a broad range of issues about agricultural resource use, production practices and inputs, farm costs and financial conditions, and well-being of farm households. ARMS data provide the only national perspective on annual changes in the financial conditions of the farm sector. The ARMS is a flexible data collection tool with several versions and uses. Specifically, the ARMS is conducted annually by USDA's National Agricultural Statistics Service to:

- (1) Gather information about production practices used to manage pests, soil, nutrients, and other aspects of plant growth, as well as the management tools and equipment utilized in the production process.
- (2) Determine what it costs to produce various crop and livestock commodities.
- (3) Determine farmers'/ranchers' net farm income and provide data on the financial situation of farm/ranch businesses.
- (4) Determine the characteristics and financial situation of farm/ranch operators and their households, including information on their off-farm income.

Annual production cost estimates are based on data collected in the ARMS every 5-8 years for each commodity and updated each year with estimates of annual price, acreage, and production changes. More information about the ARMS can be found at [www.ers.usda.gov/briefing/ARMS](http://www.ers.usda.gov/briefing/ARMS)

### Are Producers Covering Costs?

Short-term production decisions are mostly based on the relationship between operating costs and expected product prices. Producers have already incurred the cost of owning farm assets, and so give asset cost little consideration. However, as the planning period stretches to 5-10, or even to 20 years and capital assets have to be replaced, producers consider both

operating and asset ownership costs in relation to expected prices (see Enterprise Production Costs). Replacement of farm assets requires substantial investments, so farmers often make that decision in conjunction with determining whether to continue with a commodity or with farming altogether. Low-cost producers are generally better able to survive periods of low prices and thrive when prices improve, while high-cost producers are often the first to exit farming when prices are low.

While production costs can be used as an indicator of the financial success of farm enterprises, they are not the complete story. Commodity prices and revenue from all sources-commodity sales, contracts in futures markets, production contract fees, insurance indemnity payments, and government program payments are needed to put the costs into perspective. All of these sources can contribute to the price producers effectively use as the basis for production decisions.

Arranging farms by production costs per unit shows how many producers of a given commodity are able to cover costs at various prices. For example, at \$2.59 per bushel of wheat (the average price 1998-2001), most wheat-producing farms (85 percent) covered operating costs. Similarly, most producers of corn (82 percent) and soybeans (96 percent) also covered operating costs, despite low crop prices, during 1998-2001. This helps to explain why most producers continued to produce wheat, corn, and soybeans despite the relatively low prices.

However, when asset ownership costs are factored in, the picture changes. Nearly half of U.S. corn and wheat producers and one-fourth of soybean producers were unable to cover both operating and ownership costs at average commodity prices during 1998-2001. Because corn, soybean, and wheat producers use machinery that is mostly interchangeable among crops, some producers responded to the low prices by changing their crop mix. Also, this cost-price squeeze has put an emphasis on enhancing revenues through a variety of sources, such as government programs, and on controlling or cutting costs. Government program support has likely helped many producers remain in business and may explain why structural adjustments in these industries have been gradual. Improved prices for most crops in 2002-03 have also eased the financial pressure on many high-cost producers.

Hog and milk producers have faced even more divergent prices and costs in recent years. While 13 percent of milk producers and 41 percent of hog producers were unable to cover operating costs between 1998 and 2001, more than half of milk producers and nearly three-fourths of hog producers were unable to cover both operating and asset ownership costs. Not surprisingly, many producers exited these industries and continue to do so as farm milk prices (under \$12 per hundredweight) and hog prices (below \$40 per hundredweight) remain low.

The distribution of operating and ownership costs also reveals differences between low- and high-cost producers. Low-cost producers, representing the 25 percent of wheat farms with the lowest total costs, produced wheat at \$1.86 per bushel or less in 1998. In contrast, high-cost producers, representing the 25 percent of wheat farms with the highest costs, produced wheat at \$3.62 per bushel or more. Differences in the characteristics of low- and high-cost producers and their farming operations provide insight into why costs vary among farms and indicate factors that may influence financial success.

### **Enterprise Production Costs**

The costs of monetary inputs provided by all participants in the production process—farm operators, landlords, and contractors—are included in either operating or asset ownership costs.

Operating costs include the costs for items used in the production process, such as seed, fertilizer, pesticides, fuel, feed, veterinary and medicine, and hired labor.

Asset ownership costs include the annualized cost of maintaining the capital investment (depreciation and interest) in machinery, equipment, and facilities, and costs for property taxes and insurance.

Not included in operating and ownership costs are the opportunity costs for other resources, such as the farmer's labor and land. For example, the time spent by a farmer in the production of a commodity could have been spent producing other commodities or working at an off-farm job. Land has a cost equal to its rental rate, whether the land is actually rented or owned by the farmer. Costs for these resources may affect the business decisions made by some farmers, but many farmers are willing to accept a return to these resources that is less than their opportunity cost in order to remain in farming.

### **How Do Low- and High-Cost Producers Differ?**

ARMS data indicate that low-cost producers are generally younger and more educated than high-cost producers. For example, more low-cost producers of corn, soybeans, and wheat are under 50 years of age than are high-cost producers of these crops. Likewise, low-cost producers of corn, feeder cattle, and milk are more likely to have attended college than are high-cost producers. Research has indicated that younger and more educated producers are more likely to adopt production practices and technologies that may reduce unit costs and enhance farm

productivity.

Over half of U.S. farm operators work off the farm, and only about 40 percent of farm operators consider farming their primary occupation. Low-cost production of farm commodities is more often associated with farmers whose major occupation is farming. For example, 94 percent of low-cost hog producers report their primary occupation as farming, versus just 63 percent of high-cost producers. Producers dependent on farming as their primary income source likely have different goals and expectations from farming and may place more importance on controlling costs. In contrast, producers primarily retired or part time have a shorter planning horizon and are more likely to use facilities and equipment closer to the end of their useful life and at less than full capacity, which contributes to higher costs.

Only on cow-calf operations were the production costs of retirement and residential farms competitive with those of full-time (occupational) farms. These cow-calf operations tend to use fewer inputs and stock fewer cattle than do other operations. Many retirement and residential farms raise cattle because of the low labor and management required, using acreage that would otherwise be idle.

Cost advantages for certain commodities also accrue to regions due to more productive climate or soils. For example, low-cost producers of corn and soybeans are more often located in Corn Belt States where high-quality soils produce higher yields than in the Southeast, and where ample rainfall reduces costs relative to irrigated crops in the Great Plains. Low-cost cattle producers are more often located in Southern and Western States with a milder climate that reduces cattle feeding costs during the winter. However, technological and organizational advances in hog and milk production have offset much of the cost advantage enjoyed by traditional production areas. As a result, hog and milk production is growing more dispersed.