

1992 Cotton Management Economic Notes

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York Cotton Exchange Futures price, grade 41, staple 34) from 1977 to 1991 and the monthly basis variation.



Introduction

Cotton markets continue to be highly influenced by the weather. Rain, cold and hail have been a problem throughout the Cotton Belt with western Texas hit particularly hard. Many acres in Texas will need to be replanted if conditions dry out and if there is time. Uncertainty about the condition of the current crop has caused at least a temporary rally in the spot and futures market.

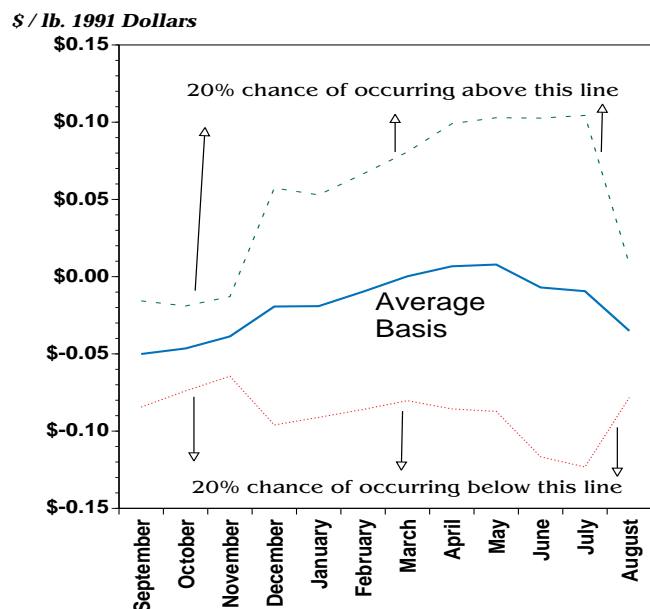
Basis Considerations When Marketing Cotton

Basis refers to the difference between a local cash price and a specified futures market price and is most commonly referred to in trading circles as **cash minus futures**. How does basis affect cotton producers? Basis affects growers by influencing the profitability of their marketing decisions -- *method of selling* and *timing of sale*. If current basis levels significantly exceed the average seasonal basis level, this indicates that the local cash price is strong in relation to the futures market and favors selling using the cash market rather than forward pricing with futures. Conversely, basis levels that are substantially below the historical basis favor forward pricing over utilizing the cash market. The figure to the right gives a portrait of Arizona's basis by giving the average monthly basis for Phoenix (Phoenix cash grade 41, staple 34; minus December New

Basis usually has a very distinct seasonal pattern for storable commodities like cotton, as illustrated below. The upward trend in basis from September through May is primarily exhibiting a "storage cost premium" from one harvest to the next. Anticipation of the upcoming harvest causes the storage premium to drop off in July and August. Basis volatility is greatest during the growing season due to weather and production uncertainties. Volatility declines as harvest and contract maturity (i.e., November for this series) approaches. The current basis level for Phoenix cotton has been around $-\$.016/\text{lb.}$ or very close to its historical average.

Basis is an important factor in your marketing strategy. But other fundamentals like the price

Average Monthly Basis for Phoenix from 1977 to 1991.



Recent Prices	June 12, 1992	
	Upland (c/lb)	Pima (ELS) (c/lb)
Spot	63.82	88.50
Target Price	72.90	105.80
Loan Rate	51.15	88.15
December Futures	64.88	

Note: Upland Spot for Desert SW grade 31, staple 35; Pima Spot for grade 03, staple 46 (6/5/92); Phoenix Loan Rates.

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level, risk diversification, and income tax considerations need to be considered in a marketing plan.

Cost Issues in Insect Control

Management decisions regarding insect control are difficult. They require expertise in recognizing the severity of problems and determining the proper response. Some growers have taken the approach that no action should be taken until a problem exists and then an all out attack should be mounted. Such an approach has several problems with the dynamic nature of the environment in the cotton field and is often very expensive.

Insect control is really a year round job. It starts with proper crop termination and plow down from the previous crop and continues until it is time to start the process again. Weather and other conditions then determine how the actual populations of insects can affect the crop. Monitoring, scouting and only applying chemical controls in carefully planned programs are paramount to sound insect control.

In Arizona cotton, the complex of insects can vary from field to field and place to place. The activities of the insect populations and the growing cotton plant can be highly interrelated. However, the major economic pest is the pink bollworm. A strategy to control the "pinky" is to plant in such a way as to take advantage of the natural instinct of the insect to emerge from over wintering in a highly predictable and very suicidal way. The strategy then calls for timely planting and to reduce early season populations by applying chemicals to control the residual populations.

From an economic point of view, this strategy is very beneficial. The actual insect control strategy for a season might look something like this:

Activity	Times	Cost Each	Total Cost
Scouting		\$6.00	\$6.00
Pin-head Spray (Ground)	3	\$6.00	\$18.00
In-season Application (Pinky)	2	\$13.10	\$26.20
Late Season Application	1	\$8.30	\$8.30
Total per Acre			\$58.50

An alternative that does not control early season buildup of pinkies, might look like this:

Activity	Times	Cost Each	Total Cost
Scouting		\$6.00	\$6.00
In-season Application (Pinky)	8	\$13.10	\$104.80
Late Season Application	2	\$8.30	\$16.60
Total per Acre			\$127.40

Actual total costs, of course, depend on the efficacy of the materials used and the prices for scouting and chemical controls negotiated by the farmer.

A Conclusion

- **Early season control of pink bollworms can reduce the costs of controlling insects in Arizona.**

Costs Through May

The following table provides a summary of the estimated costs of producing cotton that have occurred through the month of May for various counties in Arizona. To provide the estimates on a per pound basis, a target yield was assigned to each county. If an individual grower's yields are higher than the "target" yield, their costs will be lower. If their yields are lower, the costs would be higher.

A column titled fixed costs, provides an estimate of the cost of owning land and equipment. Fixed costs are associated with irrigation district assessments, depreciation and opportunity interest costs on wells and equipment and land cost.

Controlling cost will prove very important for growers in 1992.

1992 Estimated To-Date (June 1) Production Costs, \$/lint lb

County	Target	Growing Costs		Fixed	All Costs
	Yield	May	To Date	Cost	To Date
Yuma	1,300	.02	.06	.25	.31
La Paz	1,300	.01	.09	.27	.36
Mohave	1,100	.01	.10	.23	.33
Maricopa	1,250	.01	.08	.23	.32
Pinal	1,300	.04	.12	.26	.39
Pima	1,100	.01	.07	.28	.35
Cochise	700	.09	.29	.42	.71
Graham	1,050	.03	.14	.31	.45
Greenlee	850	.02	.11	.36	.47

Note: Based on Wade, et al., "1992-93 Arizona Field Crop Budgets", Various Counties, Arizona Cooperative Extension, Tucson, January 1992.

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