

University of Kentucky

UKnowledge

Soil Science News and Views

Plant and Soil Sciences

1-1986

Cutting Production Costs in 1986

Kenneth L. Wells

University of Kentucky

John H. Grove

University of Kentucky, jgrove@uky.edu

Follow this and additional works at: https://uknowledge.uky.edu/pss_views



Part of the [Soil Science Commons](#)

[Right click to open a feedback form in a new tab to let us know how this document benefits you.](#)

Repository Citation

Wells, Kenneth L. and Grove, John H., "Cutting Production Costs in 1986" (1986). *Soil Science News and Views*. 134.

https://uknowledge.uky.edu/pss_views/134

This Report is brought to you for free and open access by the Plant and Soil Sciences at UKnowledge. It has been accepted for inclusion in Soil Science News and Views by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.

Department of Agronomy

Soil Science News & Views



Vol. 7, No. 1, January 1986

CUTTING PRODUCTION COSTS IN 1986

K. L. Wells and J. H. Grove

With the stressful economic situation that continues to face Kentucky farmers in 1986, the College of Agriculture is continually asked, "What are some of the things which can be done to ease the cost-price squeeze?" In response to this question, the following suggestions for improved, more cost efficient soil and crop production management are offered: These management techniques to get the highest possible yields without added costs are sometimes overlooked although they can offer increased yield potential at no added cost.

Crop Rotation - Useful with all crops, rotation can provide an immediate 5-10% yield advantage to corn and soybean growers without added costs. Reasons for improved crop performance vary, but reduced insect, disease, and weed pressure are important. Pesticide expenditures are often greater in continuous cropping; for example, where greater herbicide selectivity is required for problem weeds. Soybeans should not be planted where "sudden death syndrome" was observed the previous year. Other examples are western corn rootworm or soybean cyst nematode control by rotation rather than with chemicals.

Timeliness of Operations - This is another factor which can directly affect economics of production. Being ready to go costs little, but can greatly influence yield (at planting) or yield recovery (at harvest). With a potential yield loss of 1.3% per day for corn planted after May 15, 1.9% per day for soybeans planted after June 10, and unpredictable rainfall conditions during both spring and fall, it pays greatly to be set up to plant and harvest large acreages of corn, soybeans, and small grains as rapidly as possible. Untimely operation often leads to compaction if wet soils are worked or driven over. Serious soil compaction lowers yield potential and costs money to correct. Crop rotation can also improve the timeliness of planting and harvesting operations, permitting the work load to be "spread out" without loss of yield potential. No other commonly occurring single factor is likely to have as much negative impact on yield and quality as late planting and harvesting. So, plan and control planting and harvesting dates to the maximum possible extent.

Varietal Selection - Superior varieties (there are often several for each region of the state) should be selected for their yield potential, disease resistance, and appropriate maturity. A range of maturities in the choice of full season corn and soybean varieties permits scheduled harvesting, greater yield recovery, and timely

The College of Agriculture is an Equal Opportunity Organization with respect to education and employment and is authorized to provide research, educational information and other services only to individuals and institutions that function without regard to race, color, national origin, sex, religion, age and handicap. Inquiries regarding compliance with Title VI and Title VII of the Civil Rights Act of 1964, Title IX of the Educational Amendments, Section 504 of the Rehabilitation Act and other related matters should be directed to Equal Opportunity Office, Kentucky Cooperative Extension Service, University of Kentucky, Room S-105, Agricultural Science Building-North, Lexington, Kentucky, 40546.

winter wheat and barley planting. Late maturing varieties may have a greater yield potential, but that can be lost due to a late harvest when the grower's entire acreage is planted to such cultivars and the harvest weather is wet.

Reducing Tillage/No-Tillage - Some growers can switch to no-till or reduced tillage with little or no added costs. Although reducing or eliminating tillage may require a higher level of management, the no-till technique is already being widely used in Kentucky. No-till conserves rainfall and increases soil water content by 15-25% due to reduced evaporation and increased infiltration. This hedge against short term drought stress is particularly effective on well drained soils like the Crider and related soil series.

Use Only Those Inputs Which Will Pay - Seed, fertilizer and pesticide needs should be calculated on a field-by-field basis. Such independent evaluation permits individual decisions on if, what kind, and how much lime, fertilizer, herbicide, and pesticide to purchase. Soil tests and knowledge of weed infestation are required. Fields requiring high per acre costs may be set aside or leased to others for different production purposes.

Other Factors - Planters should be checked and adjusted to give the desired seeding rate. Overseeding is wasteful and underseeding reduces yield potential. Money can be saved on fertilizer inputs in several ways. The nitrogen in sod crops can be utilized in corn and tobacco production, reducing N fertilizer needs by 1/3 to 1/2, if these sods are located on suitable soils. Manure can partially or completely replace commercial fertilizers in meeting plant nutrition requirements. Banding can improve phosphorus and potassium use efficiency over broadcast applications, allowing rates to be reduced by 30 to 50%. Splitting or delaying the nitrogen application for corn on soils that are less than well drained allows N rates to be reduced 25-50 lbs/acre from that recommended when all the N is applied at planting. Herbicide selection and application should be both proper and timely if the desired spectrum and level of weed control is to be achieved. Band, wick, and recirculating technology can improve herbicide effectiveness and stretch weed control dollars.

Don't try to leave out or cut back on production inputs if it is likely that increased yield, quality, or productivity will more than pay for the added cost. New, untested, or unproven (to the individual grower) products should be tested in small areas within one or more fields so that side-by-side comparisons can be made. Unnecessary expenses add up. Production cost savings of as little as \$5.00/acre can multiply into a substantial sum.