



## Without Knowing It . . . Growers Can Go Broke

by Clay Napier\*

"I saved \$3,000. I had planned to spend that much trading in for a new tractor. I didn't because my cost analysis showed that I could come closer to justifying a new pickup truck."

That was farmer Ross Bryce of Pima, Graham County, talking. He was responding to a writer's question as to whether he received any concrete benefit from the farm management classes conducted around the state by the University of Arizona Cooperative Extension Service.

Bryce is typical of that new breed of Arizona farmer who has learned that time spent in the classroom makes money just as surely as harvesting the crop.

A major factor in this picture is the computer. It has come down from the laboratory to the farm at a time when more farms reportedly fail because of poor management than lack of knowing how to grow the crop.

Along with the computer has come a new language, including such phrases as "electronic data processing," "E-MAP," "computerized man-

agement," and "linear programming."

This trend has progressed so far that the average city man no longer understands much of what the farmer says.

The new language of the soil has gotten a swift boost from Extension, which moved into the computerized farm management field to help farmers meet the challenge. The response to the special classes conducted in various sections of Arizona by Dr. Ramon W. Sammons, farm management specialist, has been phenomenal.

Here's what some other Arizona agriculturists say about the classes:

• Pima County rancher John W. King — "I've learned more practical, useful knowledge about farm management in these six sessions at the University of Arizona than I had learned in all of my prior training."

• Fertilizer firm manager Ed J. Schur of Marana — "This training is a big asset to me in helping other farmers make management decisions. I know one man who replaced \$25,000 in hand labor costs with \$7,000 worth of chemicals such as weed killers. Proper management records can iso-

Ramon W. Sammons, left, farm management specialist with Cooperative Extension Service of UA, discusses new farm management methods with Ross Bryce of Pima. Bryce says taking the new farm management course taught by Sammons saved him money.

late situations like using \$12 for chemicals to replace \$40 for weed chopp-

ing."  
• Max Green, who grows cotton, sugar beets, alfalfa and grain sorghum near Safford — "I didn't really know how many hours I was putting in on my tractors until I took the farm records course. I learned that my bigger, more powerful tractor was saving me money in spite of the fact it was using more fuel. A machinery time study I made as part of the course showed me how much work each tractor ought to do."

• Eden farmer Bob Colvin — "If every farmer had exact records they could have better management and make more money. Otherwise, a farmer can be going broke and not know it."

• Scott Pace of Solomon, speaking for himself and his wife, both of whom took the training — "We've been shocked at what we found at our own farm doing homework for this course. We got a lot out of it."

• Walter Foote of Safford — "I've enjoyed the training, and I've learned plenty in it. The most important thing

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In picture left, Sammons, from left, takes the farm records from Bob Colvin of Eden, right. Mrs. Colvin center, who knows the farm records works with her husband in converting from the old method of keeping farm records to the computerized farm management procedures. In picture below John Sears, Graham County Agricultural Agent in charge in talking to Bob Colvin suggests giving up the "shirt pocket method of management" and adopt computer methods which include the large books on the car hood.

an approximately \$12,000 drop in the farmer's cost for the same production the following year. This was added income in his pockets."

In another situation, near Florence, said Brueck, a hog producer was not making any money on his animals. The computer ferreted out excessive feed costs. The farmer then bought a custom mixed feed which cost \$30 a ton less than the feed he had been buying.

The farmer also changed male hogs,

is that it made me take a closer look at my farm operation and analyze it."

• Pete Brauley, manager of the Ellsworth Ranch in Graham County—"I've learned much useful information in this course. Getting deep into the homework increased my interest in the course."

• Ted Larson of Solomon — "This linear programming will, I think, make or break us farmers in the future."

Dr. George E. Hull, Extension Service director, noted that Extension initiated the management program because the subject is of great interest and concern among Arizona farmers.

"A farmer must be a good manager to survive these days," said Hull.

Pima County Agent James F. Armstrong added, "This is an area in which we need more intensification. We're keeping the training practical so that farmers can actually use it."

John L. Sears, county agent in charge in Graham County, summed up the situation in these words: "One of the big benefits of this is that it spreads the idea that there is a precise and orderly way to run a farm and that it pays off in dollars and cents."

"The computer can tell how much of which crop to grow for maximum profits. It can give all of the alternatives available to the farmer at the speed of lightning," said Sammons.

David A. Brueck, Extension farm records specialist and one of the pioneers in the farm computer field, tells of the experience a Casa Grande farmer had with the program after otherwise failing to figure out on his



own why his cotton profits were so low.

Fed a solid diet of information, the computer quickly isolated water costs as excessive. Further checking revealed that his natural gas pumping units, which supplied water for more than 400 feet of irrigation, were faulty and using more fuel than the average.

In the blink of an eye, the computer had found the culprits.

"As a result of pinpointing the problem, the farmer was able to negotiate with the land-owners, and they agreed to replace his pumping units and lower the cost of his lease," said Brueck. "He was a good farmer and the land-owners wanted to work with him to keep him on their farm."

"The result," added Brueck, "was

bringing in new breeding stock. Consequently, he received a profit of about \$4 per hog on the 2,000-head-per-year operation.

Arizona's Extension farm computer program, which has won recognition throughout the nation, was born in Pinal County. Things began to happen after three farmers there approached County Agent Charles E. "Chuck" Robertson on the subject back in 1958.

The farmers wondered whether their records could be processed by the computer to help them in making farm management decisions.

Robertson reckoned they could and proceeded to lay the groundwork for the program, which caught on and continues to grow in popularity among the state's farmers and ranchers.