## profile ...

## Prosperous Iowa corn farm points up two trends in midwestern agriculture: participation in the Soil Bank, and the switch from dry to liquid fertilizers

WHEN Evan Burke majored in VV political science at the University of Iowa, he probably had no inkling of how his schooling would eventually fit in with his chosen career. One might think there should be little connection between farming and political science, but some of the courses Burke took over 20 years ago serve him well today as he deals with government farm programs.

This year corn grows on the Burke farm for the first time in four years. During the past three years, Burke was an Iowa corn farmer who didn't grow corn. And though Burke's corn land is no longer in the Soil Bank, he has about one-third of his acreage "loaned" to the government. Over the next five years the government will pay Burke some \$8000 for not growing crops on this land.

Making the most of what the government offers, coupled with good farm management, has made the Burke farm a sound enterprise. Evan Burkeowner, farmer, and former political science student-makes a success of agriculture by combining what he feels is the best of the new and the old. Burke planted his corn this year with the latest model, multipurpose row crop applicator. He used generous amounts of granular fertilizer at planting time, and followed up with a nitrogen side dressing during the final cultivation. But on crops other than corn, Burke still uses manure.

The Burke farm consists of about 270 fertile acres located a few miles west of Sumner in northeastern Iowa. This year it has 60 acres devoted to corn, 70 in sovbeans, and 45 in hay. The remainder, 92 acres, is in the government's conservation reserve program. Burke has used commercial fertilizers and agricultural chemicals for the past 15 years. He usually follows the recommendations of Iowa State's extension service.

Burke's 60 acres of corn land received 10 tons of 10-10-10 granular fertilizer this year. Side dressing took about two tons of 33% ammonia solution. All this cost roughly \$800, through local dealers. Burke plays no favorites, likes to shop around

among the dealers in his area to find the best price.

So far, Burke has not used mixed liquid fertilizers. But liquids are popular in his area, and he may give them a try soon. Burke says that if he finds he can get equal results from liquids, without the trouble of handling 80-pound bags under the hot Iowa sun, he most likely will switch permanently to liquids.

Also, he feels that liquids might be easier to apply evenly. He recalls one



Evan Burke

year when he had trouble with the fertilizer hoppers attached to the corn planter. Two rows were set too lean, while the other two got an overdose of plant food. The result that fall was a strange cornfield; in one section there was a foot or more of difference in height between adjoining rows. Burke thinks he might avoid problems like this with liquids. And, he notes, liquids are 100% soluble. Though in the long run most dry fertilizers are just as available as liquids, Burke would prefer to have all the fertilizer he puts down available right away.

Though a strong supporter of commercial fertilizers, Burke retains solid faith in manure. It helps condition the soil, can't cause burning, and is available free, delivered to the barnyard, says Burke. For these reasons, manure is the main fertilizer on Burke's crops other than corn. On hay, oats, and sovbeans he feels that in many cases it is debatable whether commercial fertilizer gives him enough benefit to pay for its cost.

As for pesticides, Burke uses them liberally wherever he thinks they are needed. For instance, one field has a troublesome patch of Canada thistle. Burke sprays this patch regularly, and although the thistles haven't given up completely, they are held down so they no longer cause much damage. The corn planter Burke purchased this year has attachments for pre-emergence spreading of granular pesticides, and he hopes this will help to solve his weed problems.

Burke feels that his participation in the Soil Bank has been well worth while. For example, last year he received \$58 per acre for his corn land. While this is less than the land would return during a good corn year, it is a guaranteed income that can't be affected by weather or other uncertainties of farming.

Besides taking all the risk out of raising corn, the Soil Bank gave Burke another benefit. He had the land planted in nitrogen-storing legumes which built up the soil, thus reduced the amount of fertilizer he had to buy this year. Iowa State estimates that an average growth of alfalfa or clover contributes to the soil some 30 to 50 pounds of nitrogen per acre.

For the 92 acres Burke has now "rented" to the government for five years, he will get \$18 per acre. He must keep this land planted in grass crops, must control weeds, and must follow the year-to-year government rulings on how much corn and soybeans he can grow. He feels that it is a fair bargain; the government accomplishes its purpose, while Burke gets a small but steady income. At the end of the five years, his 92 acres will be in much better condition.

Burke relies heavily on reading to keep up with new developments in farming. His favorite farm magazine is Wallace's Farmer, and he also regularly reads Farm Science, a monthly publication of Iowa State.

One of Burke's main concerns about the future is the rising cost of doing business. "We handle a lot of money during the course of a year, but it's surprising how little is left after the bills are paid," explains Burke. He feels it's important to watch costs, and likes to take the most economical route in all his operations. One example is the tractor on the Burke farm. It is an English made Diesel, more expensive to purchase than a gasoline tractor, but cheaper to operate.