## Del. dairymen grow 206 bushel no-till corn

By Doris Crowley

NEWARK, Del. — Last summer was another dry year — disastrously so in some areas — but that didn't stop two northern Delaware dairy farmers from producing 206 bushels of corn without irrigation. They did it by switching to no-till and using some top management practices.

Ed Williams and his son Neal farm about 450 acres in the Hockessin - North Star area. Most of the grain they grow goes to feed their 90-cow dairy herd. Last spring they put in about half of their 200-acre corn crop with a new no-till planter. The rest was conventionally planted.

They've experimented before with no-till on a very limited basis—only three or four acres using a borrowed planter. "We liked the results," says Neal, "and decided this was the year to go no-till."

It certainly was. They averaged 205.77 bushels an acre dry land on a 14-acre hillside. The strip—a fertile Chester loam with clay—traditionally yields well. But it's never produced anything like this before. When they realized they had something special, they called in Extension Agent Dean Belt to confirm the yield.

"This is the highest dry land notill corn yield that the Extension Service has ever measured here in Delaware," says Belt. He knows the father and son team primarily through DHIA — the state Dairy Herd Improvement Association. He didn't work directly with them on their corn production. "But," he says, "They used some darn good techniques we recommend." The corn was planted no-till in soybean stubble after barley — one of the best possible rotations, according to Belt.

The Williams' planted several hybrids. All did better under notill, but the top yielder was Agway 849X, the same long-season hybrid that gave well over 300 bushels an acre under irrigation the previous year in tests at New Jersey's Agricultural Experiment Station in Rutgers.

The corn was planted May 6 in 36-inch rows at a rate of 24,000 seeds per acre. Final stand was

23,000 plants per acre. "We got good germination because the ground was very loose at planting and there was good penetration," says Ed Williams.

They had a soil pH of seven in the top-yielding field. Potassium and phosphorus levels were both quite high because conventionally tilled soybeans grown there the year before were affected by drought and didn't grow well.

They spread 160 pounds of nitrogen, 80 pounds of phosphorus and 80 pounds of potassium before planting. This was followed with an in-row planter application of 30-40-10. They added another 50 pounds of N with their herbicide treatment (Atrazine and Lasso).

The lower half of the field, where yield was highest, also received some hog manure. Williams doesn't grow hogs himself, but got the manure from a neighbor in exchange for some corn fodder the man needed. There was about a 12-bushel increase where the manure was used.

Ed Williams figures they averaged between 130-140 bushels to the acre in their other fields. The yield is hard to measure since most of these fields are small and scattered, fitted in among the housing developments that have sprung up like mushrooms in the area. Since the corn is used as cattle feed rather than sold as grain, the ears are picked and stored in corn cribs, rather than field-combined.

There were several long, dry spells last summer, but fortunately the Williams' managed to get rain when it was most needed. During those dry spells, the leaves on their no-till corn were the last to curl.

"Where we had no-till into a good cover, I feel we got better yields than from the conventional," says Ed Williams. But he wasn't really surprised that his best field did so well. "I was shooting for 200 bushels here, especially since there was carry-over fertility from our poor soybean crop last year."

"We're sold on no-till," he adds, "though we can't go with it 100 percent because we need to plow in the manure from our cows on some of the land. No-till and conventional are both in our future."



Moisture-holding mulch from previous till correction this case soybeans—is one reason no-

till corn withstands drought so well.

## Hollenshead herd tops Franklin DHIA

BY BETH HEMMINGER Staff Correspondent

CHAMBERSBURG — Ray and Stewart Hollenshead topped the list of dairymen at the 1981 Franklin County USDA Annual banquet.

The Hollenshead herd of 33 cows were the top producers of milk and butterfat in the county. This group of quality animals produced 22,197 pounds of milk and 823 pounds of fat to capture the awards for the Hollenshead families.

This outstanding Mercersburg herd is also the first herd in Franklin County to average over 800 pounds of fat in one year.

Awards to the Hollenshead family and numerous other county dairymen highlighted the 54th Annual Banquet.

With 194 full-year herds on test. The herds of Robert Harwood, Shippensburg and Asa and Kermit Burkholder, Shippensburg, tied for the first place in the category

terfat during the past three years.

Burk-Lea Farms, Chambersburg, topped two records in

"Most Improved Herd" in but-

the county. They won the over 100-cow high herd record, milking 123 cows and producing 19,230 pounds of milk and 689 pounds of fat. High individual cow milk production award also went to the Burk-Lea Farms. Winning the production awards was their #194 cow milking 31,570 pounds, at 3.0 percent and 946 pounds fat.

Fred and Dale Rice's #114 cow topped the list in fat production with a record of 1164 pounds of fat, 21,750 milk at 5.4 percent.

Cows topping the 200,000 pounds of milk in Lifetime Production included J. David and Kathryn Long's grade holstein "Kay." Kay's lifetime totaled 203,134 pounds of milk, 6,886 pounds fat in 11 lactations.

Michael Falanney's cow #261 also topped the 200,000-pound lifetime record with 223,055 pounds of milk, 8,093 pounds fat, in 11 jactations.

With the record number of seven herds producing over 700 fat, Franklin County DHIA presented rosettes to the dairymen. They were: Ray and Stewart Hollenshead; Frank Heberlig; Oakleigh Farms; Kenneth Oliver; Elmer and Frank Ressler; and Robert Harwood.

On October 9, the Franklin County DHIA completed fifty-four years of production testing and during those years has developed a county of quality dairy herds.

In the county's beginning years, from 1928-32, only 443 cows participated in the program. These 443 cows average 7,351 pounds milk and 298 pounds fat.

During 1981, Franklin County DHIA supervisors tested 13,751 cows and these cows produced an average of 15,502 pounds milk and 580 pounds fat.

In fifty-four years Franklin County dairymen doubled their production of milk and fat.





Hockessin dairy farmers Ed Williams (left) and son Neal in field of no-till corn that yielded 206 bushels this summer without irrigation.



1/2 Mile East of Myerstown

And Design.