

## Supplemental Irrigation in East Illustrates Value This Year

Growing number of farmers along the East Coast - especially from North Carolina north to Massachusetts - are learning a dramatic lesson in 1957, about the value of supplement irrigation, the U. S. Department of Agriculture says.

Supplemental irrigation is the practice of bringing water to crops during short to medium dry spells in humid regions. Rainfall along the East Coast - particularly in the region between the extreme end of the coast - has been well below normal this year, causing considerable crop damage.

Irrigation in Delaware, Pennsylvania, and Connecticut are cases in point. In Delaware, irrigation systems numbered 124 at the start of the 1957 growing season, and it is reported that a number of additional farms were brought under irrigation as the drought developed this year. The same thing happened in Connecticut where several new irrigation systems have been installed since the growing season started. Pennsylvania has already added 20,000 irrigated acres to its total of 17,000 reported for the most recent official irrigation census, made in 1954.

These experiences are being repeated up and down the coast where irrigation has grown enormously in popularity in the last few years. Traditionally, the normally well-watered East was believed not to need irrigation. (Delaware had only 20 irrigated farms as recently as 1953.) The fact is, however, that supplemental irrigation is making a valuable contribution to farm prosperity in the area. Some of the facts on eastern irrigation are these:

1. There was a 70 per cent increase in irrigated acreage in 28 selected eastern States between 1949 and 1954, according to the 1954-55 census. During the same years, the West's increase in irrigated acreage totaled 10 per cent. A total of 546,000 acres was irrigated in the 28 eastern States in 1954. This figure makes a vivid contrast with the scant 39,000 acre irrigated in the same region during 1939.

2. Supplemental irrigation is becoming popular in States that have never known the more dramatic manifestations of aridity common to the west - such as dust storms and long-term drought. For example, in 1954 the three leading States in the 28-States area in terms of irrigated acreage were Mississippi, with 151,772 acres irrigated, and New York and New Jersey with about 60,000 acres apiece.

3. Besides tiding the farmer over short dry spells supplemental irrigation used in conjunction with fertilizers has promoted dramatic increase in per-acre yields. It is especially valuable where intensive cropping is the rule as it is in the East. Consequently, irrigation is being applied to a wide variety of high-value crops. These include vegetable, tobacco, corn, citrus fruit, rice, Irish potatoes, cotton, berries, and nuts. Even pasture has been aided profitably by irrigation. Six major crops - rice, Irish potatoes, pasture, corn, cotton, and tobacco - account for three-fifths of the total irrigated acreage.

4. More acres of rice than any other crop are irrigated in the 28-State area and most of this is produced in Mississippi. New York grows nearly two-fifths of the irrigated Irish potatoes, and New Jersey is the largest single grower of irrigated tomatoes, with 5,000 acres. About a third of all irrigated tobacco is grown in North Carolina, but irrigated corn is not concentrated in any particular State.

5. Among eastern farmers the bulk of irrigation is confined to small acreages. Thirty-eight per cent of the farmers irrigate fewer than 10 acres per farm, and another third irrigate from 20 to 99 acres. Only a few irrigate more than 100 acre.

Although the growth of irrigation has been spectacular in the 28 States studied, the total acreage is still only a fraction of the national total of close to 30 million acres. Arkansas, Louisiana,

and Florida, east of the Great Plains but not included in the 28-State study area, account for about 2 million acres. There are more than 27 million irrigated acres in 17 Great Plains and Western States.

The East has a total of about 650,000 irrigated acres, according to the latest available figures. Total acreage irrigated in a humid region depends upon rainfall in a particular year. During wet years, farmers automatically cut down on the acreage irrigated. During dry years farmers are prepared to irrigate considerably more than the 650,000 acres.

Sources of water, distribution systems used, and the costs of irrigation are variable depending upon a number of factors. About half the farmers in the 28-State

region studied draw their water from rivers or streams, and about five per cent get it from lakes or ponds. About 20 per cent use springs and another 20 per cent use wells. The remainder, located near large population centers in New York, New Jersey, Ohio, and Massachusetts, tap municipal reservoirs.

Sprinklers are the most popular method of irrigating in the East. About four-fifths of all farmers use them to water more than two-thirds of the irrigated acreage. Between five and 10 per cent use fixed overhead pipes, often in tandem with sprinklers. About two per cent use portable gate pipe, five per cent use ditches, and another five per cent, chiefly rice farmers, practice flooding.

Average investment in these installations is \$5,500 a farm. By States, though, the average investment ranges from \$2,800 to \$10,000 a farm. Average cost per acre

in the region is \$150, with a range by State of \$5 to \$500 an acre.

Total acreage irrigated has a marked effect upon cost. Farmers with fewer than 10 acres of irrigated land have an investment of close to \$500 an acre, while those irrigating more than 100 acres are investing \$90 an acre and less.

Cost figures include the purchase of sprinkler or other distribution equipment, drilling wells, constructing storage ponds, buying pipe, or preparing land.

The 28 elected Eastern States on which these irrigation figures were compiled are: Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, Maryland, Delaware, Virginia, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Tennessee, Kentucky, West Missouri and Iowa.

## Charles Hollinger Egg Production Contest Winner

With an average production of 81 per cent over eight months, Charles Hollinger, R2 Lititz, won the egg laying contest sponsored by Eby's Mill Inc., Lititz Feed conversion was 38.

Others placing at the top in the contest were Howard Martin, R2 Lititz; Graybill Hollinger, R2 Lititz; Noah W. Kreider & Sons, R3 Manheim, and Melvin Bucher, R1 Lititz.

Awards were presented at a dinner meeting Thursday at Warwick High School Auditorium, Lititz.

Speaker was Dr. Leo Curtin, associate director of McMullen Mills research staff. His subject was "Feed Today and Tomorrow."



Lester Kreider, Mt. Joy, Pennsylvania

*Pennsylvania feeder runs own split feeding test...*

## Purina-fed steers gain 25½% more ...sell 50¢ per 100 higher

Sometimes it's hard to see the difference in feeds just by looking at them. Same way when you listen to the sales stories. So Lester Kreider, of Mt. Joy, Pennsylvania, ran his own split feeding test.

Out of a group of 20, he separated six steers and put them on a ration of corn and cob chop, barley, molasses, and Purina Steer Fatena 32% with stilbestrol. The other 14 steers went on the same ration except for the protein supplement. A competitive brand was used as a direct comparison.

### 100 DAYS LATER...

Mr. Kreider paid \$17.60 per hundred pounds for the six Purina-fed cattle. 300 pounds (average per

steer) and 100 days later, he sold them for \$21.00 per hundred. Average daily gain was exactly 3 pounds.

The fourteen head on a competitive ration were slightly higher quality cattle, and cost Mr. Kreider \$18.50 per hundred. Yet after 100 days on feed, they showed only 2.39 pounds daily gain, and brought 50¢ less per hundred at market than the six Steer Fatena-fed steers.

### NAME YOUR RATION

Low roughage—high grain, high roughage—low grain... or anywhere in between, there's a Purina Steer Fatena feeding program to help give you top results. The man who runs the Store with the Checkerboard Sign in your community will be happy to talk it over with you.



FEED PURINA... YOU CAN DEPEND ON THE CHECKERBOARD



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**James High**  
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Ephrata

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**J. Fred Whiteside**  
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