

Tile Drainage May Double the Crop

C. H. Falk sr. Has Proved This...Machine Cuts the Cost

There is much land in Linn county that would be benefited by tile draining, and enough such draining has been done to demonstrate that fact, but of late the high cost of tile as put a damper on such improvement.

Thirty years ago J. C. Standish tile drained a wet portion of his little farm west of town and was well pleased with the result of the investment, though he says that with tile costing as much as it does now he would hesitate to use it if placed in the situation he was in then. On one part of the tract water used to stand three feet deep at times. The tile ended that.

C. H. Falk sr. is the leading exponent of tile draining in this section. Coming here 22 years ago, with a knowledge of drainage practices on eastern farms, he began to lay tile and to be laughed at by neighbors for doing so. Soon he was sowing crops in March on land similar to that which his neighbors could not work until May or the beginning of June, and he was every year getting double the crop from that land that they did from theirs in their most fortunate years, while in many years they got no crop at all.

Mr. Falk continued to lay tiles until all but 25 of his 160 acres is drained. He is well advanced in years and may not lay any more tile, but he has made a lifetime success of tile draining low land.

Mr. Falk says the present high price of tile is a deterrent to improvement of much land hereabout that is too wet in spring. He advises owners of such land to take lessons in working cement and then make their own drain tile of that material, which will give them a better and more durable article than clay tile.

The Corvallis Independent last week told of another way in which the cost of tile draining may be cut. It said:

Philip Corbett, manager of the Corvallis brick and tile works, sells drain tile. To sell his tile, and at the same time reclaim much land which otherwise would be almost worthless, he has solved the problem of installation for the farmer of this territory to a great extent.

A year and a half ago Mr. Corbett purchased a drain ditcher. Mr. Corbett takes the ditcher out to the land, anywhere in Benton county, or outside if the job is of sufficient volume, and does the work at cost. More than 40,000 feet of trench has been dug by the machine and he is now confident of its efficiency and willing to carry on the work to his capacity.

The machine requires the work of three men and six horses and digs a ditch 30 inches deep and 12 inches wide at an average rate of 300 feet per hour.

"Rocks and roots" in the soil make the machine impracticable," says Mr. Corbett.

"I should like to have the opportunity to talk over the drainage problems with farmers who are considering installation of those who need it."

Broccoli Saved

Roseburg broccoli growers, whose crop was badly cut by last December's freeze, report wherever superphosphate was used as a fertilizer the plants were not killed.

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The Great Outdoors

Where Bread, Meat, Clothing, Health and Vigorous Humanity are Produced

Washington Boy Is Pig Contest Winner

His Litter Produced 3,055 Pounds of Pork.

(Prepared by the United States Department of Agriculture.)

A farm boy of Spokane county, Wash., belonging to a junior agricultural extension club, was a ton-litter contest winner of 1924, according to reports to the United States Department of Agriculture. He not only produced 3,055 pounds of pork from one litter of pigs in six months, but kept a careful record of how he did it, including the kind and amount of feeds used and all expense involved. His records show that his pigs made an average daily gain of 1.4 pounds each from date of birth until sold. This gain cost a little less than 8 1/3 cents per pound, not including alfalfa pasture to which the pigs always had free access. The boy sold his prize winners to a packing house for \$11.10 per 100 pounds, receiving 25 cents per 100 pounds because of the excellent finish of his hogs.

This young stockman, Fred Gray, began in the swine business about two years ago by joining a pig club which the junior agricultural extension agent of the county organized, buying a pig, as other pig club members do, to feed and manage in demonstrating the economic value of the best methods in swine husbandry. His purchase was a Duroc sow of excellent type. He built a warm, movable hog house, provided plenty of clean water and pasture, and carefully practiced good sanitation methods in addition to efficient feeding. He was able to raise eight pigs from the first litter. With the second litter he won the contest.

Successful Negro Juveniles

Agricultural "blues" are giving a vigorous challenge by the records which negro boys and girls have been making in their farming and home-making club enterprises under the direction of agricultural extension workers. One boy wrote his local extension agent recently that he had made 3,150 pounds of seed cotton on his 2 acres in 1924.

He had kept an account of the money he had spent in producing his crop, as a part of his club work, and after selling seed and lint cotton and paying his expenses, had \$265 left. This young farmer, Hershell Glenn, of Rockdale County, Ga., has also been following the extension agent's suggestions in feeding and caring for a pig. At the end of six months' feeding, he reports, his pig weighed 200 pounds. A negro girl of this county, Lucile Hall, has been caring for a flock of chickens as a club enterprise and has sold enough eggs and fryers to buy most of her school clothes. She canned 265 containers of tomatoes from her garden last summer to sell to assist in paying her board while in school.

Study Is Made of Many Farms

Reasons for Success or Failure by Indiana Farmers Considered.

(Prepared by the United States Department of Agriculture.)

Methods by which certain 100-acre farmers in central Indiana made satisfactory returns, even during the depression period, are compared with the methods used by less successful farmers in the same area in a study just completed by the United States Department of Agriculture. In this investigation the business records of 400 Indiana farms, covering the period from 1910 to 1922, were studied.

How the successful farmers obtained their results is discussed by the investigators in detail. On the most successful farms there was less variation in cropping systems than on other farms. Thus the four most profitable farms had a yearly variation of only 14 per cent in their corn acreage, compared to 21 per cent on the four least successful farms. Variations in other crop acreages likewise were smaller on the most profitable farms. It was also found that the most successful farms usually had as many fields of equal size as there were years in the crop rotation followed, or else they had fields that could be combined in such a way as to divide the crop acreage into as many equal parts as there were years in the crop rotation. In other words, the best farms had the

most scientific layouts.

Live Stock a Factor.

It was shown too that while high crop yields alone do not insure a good farm income, the yields on the successful farms averaged higher than on the unsuccessful farms. In the case of corn the average yield on the four best farms was 50 bushels an acre compared with 44 on the four least successful farms. Similar proportions held for the other crops. In general the men obtaining the best yields kept considerable live stock, used commercial fertilizer, drained land and limed the soil when necessary, used good seed of varieties adapted to local conditions and treated their seed to prevent diseases, and followed good methods of cultivation.

No one thing had a greater influence on comparative profits than the live stock returns per head. On the four most successful Clinton county farms the yield of butterfat per cow was 160 pounds, compared with 93 pounds on the four least successful farms. The best farms had one calf per cow every 14 months, compared to one every 15 months on the least successful farms. Other comparisons in favor of the most successful farms were: 5.9 per cent pigs per sow per year, compared with 6.6; 6.3 eggs per hen per year, compared with 5.8; and 1.5 chickens, compared to 1.2. One of the four most profitable farms had enough live stock to consume 1,251 bushels of purchased corn per year in addition to 2,400 bushels grown on the farm. On the four most successful farms the average amount of corn consumed was 2,762 bushels compared with 2,015 bushels on the four least successful farms.

Protein Deficiency.

Another important practice which showed profitable results on the most successful farms was the purchase of tankage for hogs. Operators of these farms recognized that most farm feeds are deficient in protein. They consequently supplemented home-grown feeds with purchased protein concentrates. During the eight years the four most successful Clinton county farms purchased an average of 1,400 pounds of tankage per year, as compared to less than 100 pounds purchased by the least successful farmers. The most successful farmers also purchased 3,998 pounds of mill feed a year, compared to 510 pounds purchased by the least successful farmers.

Poultry contributed average sales of \$223 a year, besides averaging \$56 worth of eggs and meat for the home table on the four most successful farms in the county. These farms also had sales of dairy products averaging \$209 a year. In general it was noted that the most successful farms were better equipped with machinery than the least successful farms, although it was recognized that a 160-acre farm may easily be overequipped.

It was found that the best 10 per cent of the 400 farms investigated yielded an average yearly income, from 1910 to 1922, sufficient to cover 5 per cent interest on their capital and \$1,405 for labor and management, and in addition an important share of the milk, meat, poultry, eggs, vegetables, fruit and fuel consumed in the farm home. Supplies thus obtained with the savings made on house rent, added an average of \$605 a year to the farm income.

Farm receipts on the four most successful of 17 farms averaged \$5,965, or a return of 7.2 per cent on the capital invested, compared with receipts from the four least successful farms in this group averaging only \$3,961, of an investment return of 4.5 per cent. While a farmer here and there made good profits during the worst period of the depression, others failed to earn a reasonable profit and a fair wage for their labor even in the war boom years. Most of the 160-acre farmers did well during the prosperous period from 1910 to 1919. But in the period from 1910 to 1915 only about half of them succeeded in making 5 per cent on their capital and a wage of \$600 for their labor in addition to the family living from the farm.

Crop Rotation Big Benefit in Garden

Good Way to Avoid Perpetuating Diseases.

The same crops should not occupy the same space in the garden from year to year. There are several reasons for this. One of the chief ones is to avoid perpetuating disease which may have afflicted some of the vegetables the genus of which may carry over in the soil. As members of the cabbage tribe and the bean and pea

FOR SALE—White Leghorn BABY CHICKS

from two- and three-year-old hens mated to cockerels having dams with records of 247 to 308.
N. Hedlund, Halsey, Oregon.
Phone 55F52, Brownsville.

family suffer from different ailments, their positions should be switched in order that any such pests may be discontinued.

A good plan is to reverse last year's plan and then change it back again next year, thus furnishing a rotation of crops. If this is not done, at least the arrangement should be changed by moving the sections devoted to one vegetable this year to some other position in the garden removed a few feet at least next year.

A good rule would be to plant the root crops next year where the leaf crops such as lettuce and spinach have grown this year or to give the root crops the space next year where the legumes, a term applied to members of the pea and bean family, have been this year. It will not be a difficult matter to study out this arrangement with a little practice.

Planting the taller growing crops such as corn and tomatoes on one side of the garden one year and then moving them over to the other side the following season will be a convenient method of securing rotation. If rotation cannot be conveniently arranged because of the small size of the plot, the best way is to make up for the deficiency by careful fertilizing and occasional liming of the soil to sweeten it up.

Warning Issued Against Quack Poultry Remedies

Poultry men will do well to investigate certain remedies claimed to free the poultry flock of mites, lice and other vermin, according to a warning issued by H. C. Severin, state entomologist of the South Dakota State college.

Advertisements have appeared at various times claiming that these remedies, sold in tablet or liquid form, when placed in the drinking water, would rid the flock of both external and internal pests. These claims are ridiculous and unreasonable, according to Severin. He finds upon examination that the liquids consist of either lime-sulphur solution, which is the ordinary orchard spray, or is only a sheep dip. The tablets are composed largely of calcium sulphide with characteristics similar to lime-sulphur solution or else contain sulphur mixed with iron rust.

Poultry men have been paying as high as a dollar an ounce for this material, when in reality it should cost less than two dollars per gallon. The claim is made that the fowl will get the remedy into their food tube by drinking the treated water. From there it is supposed to go into the blood system and then to the skin, where it destroys the mites. Such a claim is unreasonable and entirely unwarranted.

In planning and planting this year keep in mind that only quality commands a sure market.

Buy legume seed and prepare to plant several acres per plot to turn under for soil improvement.

When June grass pasture becomes dry, it is necessary to feed ensilage to supply the succulence. This is seldom necessary with sweet clover pasture.

Sudan Grass Fertilizer

There has been but few experiments made to determine the best fertilizers for sudan grass. Ordinarily where the soil is reasonably good, no fertilizers are used, but it would no doubt be advisable on poorer land to use a complete fertilizer such as is used on corn. In Kentucky the application of acid phosphate at the rate of 200 pounds per acre resulted in increased yields in eight out of ten cases. The seed can be sown with a grain drill.

Listing Good Practice

On well-drained bottom land corn planted with a lister will produce approximately as high a yield as corn planted on plowed ground. On bottom land that is heavy and poorly drained there is danger of the corn rotting in the spring in a period of wet weather when it is planted with a lister. On such land it will usually pay to plow with a disk furrow opener attachment to the corn planter.

Linn County May Be a Linen Center

Hundreds Acres of Flax to Be Sown Here This Season

During the week Mr. Sanson has become more confident about Willamette valley linen manufacture and he announces that his company is about ready to come here and build. Thus there is a prospect of three mills on the coast. Probably the one at Vancouver will be the first to operate, then the state mill at Salem and then Mr. Sanson's, if he builds, and the latter is as likely to be in Linn county as anywhere else.

At a meeting of interested farmers at the Albany chamber of commerce Saturday it developed that from 300 to 500 acres of flax will probably be raised in Linn county and that a linen mill is quite liable to be built at Albany at a cost of \$600,000. Between now and May is the time to sow the crop and the state has seed for sale at Salem. Get busy.

Favor Oats Instead of Middlings for Fattening

Wheat middlings, which many farmers buy to feed along with corn, tankage and pasture in fattening pigs, will be more expensive in the next few months than it has been before, because of the decrease in our production of cereals.

Oats can be used to replace wheat middlings to very good advantage, and are really worth more when price is considered, in making up a fattening ration for pigs. Tests made by the experiment station at the University of Illinois show that one pound of good oats is equal to one pound of wheat middlings in feeding value. R. J. Laible informs us that middlings are a valuable supplementary feed and many men feel they cannot get along without them for pigs that have recently been weaned.

For growing pigs and as a means of economy, oats can very well be used whole or ground and fed at the rate of one-half pound a day for each pig as a supplement to corn and tankage.

THE MARKETS

Portland

Wheat—Hard white, hard winter, \$1.60; soft white, northern spring, and western white, \$1.55; western red, \$1.50.

Hay—Alfalfa, \$18.50@19 ton; valley timothy, \$19@20; eastern Oregon timothy, \$24@25.

Butterfat—48c delivered Portland.

Eggs—Ranch, 25@28c.

Cheese—Prices f. o. b. Tillamook: Triplets, 25c; loaf, 29c per lb.

Cattle—Steers, good, \$5.25@5.75.

Hogs—Medium to choice, \$12.00@14.50.

Sheep—Lamb, medium to choice \$11@14.

Seattle

Wheat—Soft white, northern spring, \$1.60; western white, hard winter, \$1.55; western red, \$1.50; Big Bend bluestem, \$1.90.

Hay—Alfalfa, \$23; D. C., \$28; timothy, \$26; D. C., \$28; mixed hay, \$24.

Butterfat—45c.

Eggs—Ranch, 27@31c.

Hogs—Top hogs, \$14.75.

Cattle—Choice steers, \$5.25@9.00.

Cheese—Washington cream brick 19c; Washington triplets, 19@20c.

Washington Young America, 21@22c.

Spokane

Hogs—Prime mixed, \$12.75@14.00.

Cattle—Prime steers, \$8@8.50.

Apple Variety for Every Role

Palatable, Healthful, Nutritious and Least Expensive of Fruits.

Apples, being palatable, healthful, nutritious and the least expensive of fruits and in season the year around, lend themselves to a greater variety of uses than any other fruit. Various sorts of apples are adapted for different uses and a bulletin issued by Cornell university for the first time attempts a classification of the various apples in the market or commonly grown in regard to their desirability for dessert, apple sauce, baked apples, apple pie, puddings and for canning and drying.

Good for Dessert. The following were listed as very good for dessert, dessert being used in its oldest accepted sense, eaten raw, out of hand—Yellow Transparent when well ripened, Chenango, Gravenstein, Jonathan, Esopus, Tolman Sweet, Yellow Newtown, Northern Spy, McIntosh.

Further western states would add Delicious to this list. The following are listed as good dessert apples—Wealthy, Fall Pippin, Tompkins, King, Hubbardston, Fameuse, Wagener, Rhode Island Greening, Baldwin.

The following are listed as useful for dessert—Red Astrachan, Sweet Bough, Oldenburg, Roxbury Russet. Excellent material for apple pies will be found in the following varieties—Yellow Transparent, Red Astrachan, Oldenburg, Twenty Ounce, Maiden Blush, Jonathan, particularly good; Snow, Baldwin, also recommended, and Northern Spy.

Baking apples are listed as follows—Sweet Bough, Alexander and Wolf River Twenty Ounce, Wealthy, highly recommended; McIntosh, Tompkins King, Tolman Sweet, Rome and Northern Spy, recommended particularly.

Apples for general cooking are as follows—Primate, Gravenstein, Fall Pippin, Hubbardston, Wagener, Rhode Island Greening, Esopus, Baldwin, Roxbury Russet, Ben Davis.

For Apple Sauce. Recommended for apple sauce are Red Astrachan, Oldenburg, Twenty Ounce, Maiden Blush, Wealthy, McIntosh, Fall Pippin, Tompkins King, Jonathan, Esopus, Northern Spy.

The firm-fleshed apples are recommended for combination with celery, nuts, dates and other materials in salads. Cooked apple blends with softer materials such as tapioca, rice, other cooked fruits, and doughs of various kinds. Apples are best with foods which do not have a strong flavor of their own which will conflict with or cover that of the apple.

The housewife with these points in view frequently can substitute apples for other fruits in recipes to good advantage.

Truck Crops Show Large Increase in Production

That the American diet is becoming more and more diversified is indicated by the enormous increase in the production of vegetables during the past three or four years. These crops, according to the United States Department of Agriculture, had a gross value of \$318,000,000 in 1924—an increase of 34 per cent over 1921. Over 2,800,000 acres are now devoted to the growing of such crops as tomatoes, early Irish potatoes, strawberries, cantaloupes, green peas, onions, lettuce, celery, cabbage, asparagus, cucumbers, snap beans, watermelons, sweet corn, spinach, peppers, cauliflower, carrots, eggplant and a number of others.

The development of the canning industry and the improvement of cold storage, transportation and marketing facilities have made possible this improvement in the diet which is so important to the health of the people—especially of those who are forced to live in congested centers of population.

Truck crops, grown for sale, are a product of an intensive agriculture. They require much skilled labor, careful attention during the growing season and on most soils the use of rather heavy applications of commercial fertilizer. In fact it does not usually pay to put so much labor into these crops without using plenty of fertilizer to insure profitable yields.

The Booth-Kelly sawmills at Springfield and Wendling, which have been operating for the last six or seven weeks on a five-day week schedule, have been placed on a four-day week

Birds Need Ventilation

Even in cold weather do not make the mistake of closing the poultry house so tightly that it does not have good ventilation. Chickens can stand cold better than they can stand stuffy dampness and foul air. One of the surest ways to bring on an attack of colds and probably pneumonia is to shut the doors so tight that they do not have good ventilation. Drafts however, should be avoided.

Use good clean seed for sowing the lawn.

Sharp farmers never tolerate dull tools.

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and

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