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## EDITOR'S COLUMN

**Minnesota Weekly for Sale**  
The Press News has learned that a good weekly newspaper and job office in a west central Minnesota town is for sale, the owner being forced to retire on account of poor health. The property, including the plant, good will, and a two-story brick building, with offices and plant on the first floor, and a modern residence flat on the second, can be bought, according to reports, on easy terms. The Press News will be glad to serve by putting anyone who may be interested in touch with the owner.

**Ortonville Independent Coming Fast**  
The Ortonville Independent will soon round out its first year of existence and already seems well established in its field. The Independent, by L. A. Kaercher and Cyrus Erickson, is all home print and is well edited and made up. It certainly has the earmarks of being here to stay.

**New Farm Publication**  
The Farm Bureau Gazette, published at Thief River Falls by Messrs. AUSTAD and ROSS, is a hummer. It has several pages of solid reading matter and a classified advertising section that looks all to the good.

**Outing and Joyfest for Editors**  
The Northern Minnesota Editorial Association's annual summer outing has been set for July 21 to 24. Duluth will be the headquarters. Sidetrips will be taken by steamboat, automobile and railway to points on the Great Lakes and Iron range. The editors will also visit Cloquet where they will be guests of Senator Fred D. Vibert, editor of the Cloquet Pine Knot.

**School Children on Editor's Staff**  
The Reporter of Plymouth, Wis., pays a prize of \$1 a week for the best story sent in by a school pupil in the county, also ten cents for every other item accepted from pupils and used. "School children, do you know news?" asked the editor in announcing his novel prize stunt, and now many are proving that they do.

## GUARDS ON TREES SHOULD BE REMOVED

Wood veneer or paper placed about trunks of fruit trees in the fall to prevent injury from mice and rabbits during the winter should be removed in the spring. This is advised for two reasons. First, the bark needs sun and air to ripen properly; second, paper or wood veneer left on trunks of trees during the summer affords retreats for injurious insects.

Still another reason for taking protectors off in the spring is the fact that young trees are rapid growers, and before one realizes it the bark is pressed against the wood veneer to the point of injury. The continued use of tarred paper on fruit trees is injurious.

Field mice were not particularly destructive last winter, but the orchardist should examine trunks of young trees and should cover gnawed portions with grafting wax. The bark will grow over a small injury in time, but in case of complete girdling, either by rabbits or mice, bridge grafting should be resorted to. A description of this method of grafting will be sent from this office upon request.—F. L. Washburn, division of entomology and economic zoology, University Farm.

## LIVING COST CUT BY HOME GARDEN

The home garden, whether in town or in country, means better living and lower living costs.

"The first thing to do in making a garden," says R. S. Mackintosh of the horticultural staff at University Farm, is to make plans which will be in keeping with the size of the space available for a garden. Vegetables suitable for a small garden are dwarf beans, beets, carrots, lettuce, onions, dwarf peas, radishes, spinach, tomatoes and turnips. The larger gardens should have in addition cabbage, cucumbers, cauliflower, celery, parsley, peppers, potatoes, squash, egg plant, and sweet corn. However, tomatoes, egg plant and peppers cannot be grown successfully in northern Minnesota.

"In some cases two of the vegetables may be sown together, the one maturing early enough to give more room for the other. Sometimes quick-maturing vegetables may follow in the space from which other quick-maturing vegetables have been taken."

## ORCHARD AND GARDEN

May 1 to 8  
Evergreens should be moved just before the buds start.

Are all the worn patches on the lawn seeded? Better do the job now. Make plantings of Golden Bantam sweet corn now and at intervals of ten days or two weeks until July first. Beets, carrots, lettuce, radishes, etc., should be planted now. Make another planting of beets and carrots late in June for winter use. Early carrots will be too tough for winter.

Plant a few gladiolus bulbs and continue to plant a few each week until the last of June.

Attention might well be given to growing beets, carrots and parsnips of better quality for market. People are fast learning that there is a difference in quality in these crops due to variety and method of growing.—Le Roy Cady, associate horticulturist, University Farm, St. Paul.

## ORCHARD AND GARDEN

May 8 to 15  
Beans and other tender vegetables may be planted about May 15.

Give peonies, tulips and in fact all flowering plants an abundance of water when buds and flowers are forming. There are few if any better autumn flowers than the gladiolus. Plant plenty and begin now.

Melons, squash, pumpkins, etc., may be planted late this month, as soon as the ground is warm. Give them rich warm soil.

All potatoes should be treated for scab before planting and then planted in clean ground.

Head lettuce requires cool moist weather to head well. The loose leaf sorts are best for warm weather.

Many herbs such as sage and thyme may be easily grown in the home garden. Parsley should be sown now.

Iris and peony shows will be held late this month and early next, in many towns and cities. They are good places to study varieties.

Asparagus may be set out this month. Be sure the soil is deeply worked and is rich. It is a good plan to set the plants six inches deep at least.

When picking wild flowers do not take the whole plant. Remember leaves and roots are needed to grow again next year.—Le Roy Cady, associate horticulturist, University Farm, St. Paul.

## GOOD CARE WILL SAVE MANY FOALS

"The best time to grow foals, and the time when they will make their largest gains is when they are being carried by their dams," says N. K. Carnes of the animal husbandry division at University Farm. "Many farmers do not realize this, and begin feeding the mare a proper ration only after the foal is here. The brood mare, when in foal, should be fed a high protein ration, a ration which is rich in muscle and bone building material. This material is supplied in the form of oats, bran, and oil meal, as a concentrate, and clover or alfalfa hay as a roughage."

"The most common causes for losses among foals are constipation and navel trouble. As soon as the young foal arrives, see that he gets a good drink of his mother's first milk. This fore-milk or colostrum has purgative properties and will usually clear the foal's intestines of the excrement accumulated prior to birth. If the digestive tract is not cleaned by the fore-milk, give the foal a tablespoonful of castor oil and a warm water and soap rectal injection."

"Another thing the farmer must watch out for is navel infection. If pus and disease germs get inside the body through the opening of the umbilical cord, a local infection or 'joint ill' may develop and the foal be lost. The best way to prevent this is to keep the stable in a sanitary condition and treat the cord immediately after the foal is born with boric acid powder or tincture of iodine."

## "U" BUILDING PLANS IN STRONG DEMAND

That farmers in Minnesota are making improvements on their farms is indicated by the increasing demand for the building plans prepared by the agricultural engineering division of the state university. According to H. B. White of the division, about 1,000 plans were sent out in March, the bulk of them going to farmers. The largest call was for plan No. 128, a combined implement shed, garage and shop. Next in number were poultry house plans, with the Gothic roof barn third in the list. A new list of plans up to 180 can be had by applying to the Office of Publications, University Farm, St. Paul.

## FEEDING GRAIN TO COWS ON PASTURE

Does it pay to feed grain to cows on pasture? The answer is that it depends largely upon how much milk the cow gives and how good the pasture is.

If a cow is producing less than a pound of butterfat each day, the necessary food can be obtained from a good pasture. If she produces more than this, some grain can be fed with profit. This means that a Holstein should be able to get food enough from grass alone to make 25 to 30 pounds of milk daily, and a Guernsey or Jersey about 20 pounds. It will pay to feed grain to all giving above this amount as it is impossible for the animal to gather sufficient feed in the form of grass.

To produce a pound of butterfat daily requires at least 25 pounds of dry material. Fresh pasture grass contains only ten to twelve pounds of dry matter in a hundred pounds, making it necessary for a cow to gather and digest from 200 to 250 pounds of grass to produce from 20 to 30 pounds of milk. It is clear from this that it is impossible for a really high-producing cow giving 40 to 50 pounds daily to do so long on grass alone.

A cow yielding a pound and a half of fat daily should receive about five pounds of grain, and about seven or eight pounds of grain for two pounds of fat. When not more than five pounds of grain is needed, it may be corn, barley, oats, or any combination of grain that is cheapest. The grass supplies a good amount of protein so the danger of a shortage of this necessary material is not serious. With a high-producing cow requiring more than five pounds of grain daily, a small amount of bran, linseed meal, or other high protein feed should be added.

These recommendations hold good only when pastures are good. In mid-summer it will often be necessary to feed more grain to high producing cows or to give some silage or green feeds to help out the pastures.—C. H. Eckles, chief of the division of dairy husbandry, University Farm, St. Paul.

## PASTURES PAY IN PORK PRODUCTION

"One of the best means of cutting the cost of producing pork," says E. F. Ferrin, who is in charge of the hog section at University Farm, "is to use good pasture and forage crops. This practice is advisable whether grain be high in price or cheap; there is a decided saving in either case. Pigs getting green feed are more thrifty than those raised in dry lots, consequently gain faster and make pork at a lower cost."

"Results obtained at University Farm prove beyond question that it is a short sighted policy to neglect to grow good forage crops when pigs are being raised. Blue grass and similar pastures furnish good feed in the spring, but during summer are little better than an exercising ground. Some one crop, or more than one, should be grown to give fresh succulent green feed in summer and early fall. Dwarf Essex rape, alfalfa and red clover are the outstanding top notch forage crops in the corn belt. Of these rape is by far the most suitable for Minnesota conditions. The cost of seeding is low—about five pounds of seed per acre is an average quantity—and in favorable season the crop is ready to be pastured six weeks from sowing. If grain is fed in reasonable amounts an acre of rape will carry from twenty to thirty growing pigs through the season."

"White hogs, and sometimes black and red ones, blister when running in rape. There is nothing peculiar about this crop which causes blistering; the trouble results simply from the combination of moisture, transferred from the rape to the hog, and a hot sun. By keeping pigs out of the rape patch until the dew or rain has evaporated from the leaves of the plants, blistering can be prevented."

"Rape can be sown as early in the spring as the ground can be worked. Even a small patch in a feed lot will save grain in raising pigs."

## DO NOT SPRAY IN BLOSSOMING TIME

Fruit growers who apply lead arsenate or other arsenical sprays to trees in full bloom are accused by beekeepers of causing a tremendous death rate of bees from poisoning. Francis Jager, chief of the division of bee culture, University Farm, tells of a thorough practical test made by W. A. Price, Purdue University, and reported in a bulletin in which Mr. Price said: "Bees work freely on sprayed trees in the open, even where there are unsprayed trees about. The mortality was 69 per cent in the lime-sulphur-arsenate of lead and 40 per cent in sulphur-arsenate of lead dusted on dry."

## Story of Minnesota Wheat

### NOTE TO EDITORS

What Minnesota is doing through its University Experiment Stations to maintain its standing as the greatest "bread state" of the nation is a fascinating story. That story is being told in a series of articles of about 400 words each in the Press News. The fourth installment appears below.

### NEW WINTER WHEATS FOR MINNESOTA USE

Although the yield per acre of wheat in Minnesota is as good as it formerly was, the wheat acreage of the state has decreased. In order to keep our position as a wheat state it is necessary therefore to increase acre yields. There are two main methods by which the station plant breeders are attacking the problem. The first, breeding for rust resistant spring wheats, is well under way, but is not yet solved. It will be the subject of a later article. The second method of increasing yields is through a larger planting of winter wheat, under conditions where winter wheat may be grown. The chief difficulty of growing winter wheat has been the lack of hardy varieties.

Although more than 200 new introductions, many of them from Russia, have been tried at the experiment station, no variety has been found which

contains all the characteristics needed for Minnesota conditions. The Crimean group, commonly called Turkey wheats, mature early, thus escaping rust. They excel in milling quality, but lack winter hardiness in Minnesota, although they give high yields in seasons when winter killing is not a factor. The Odessa variety from Russia excels in winter hardiness, but is a low yielder. By applying the Mendelian principles of heredity and by careful selection of the progeny, a new wheat has been developed by crossing Odessa with Turkey. This new wheat excels in winter hardiness and also produces a good quality of grain. In yield tests it has proven its worth. It has been named Minturki and is now being increased. A considerable amount of seed will be available in the fall of 1921. Write the secretary of the Minnesota Crop Improvement Association at University Farm, St. Paul, for full information.

Other wheat varieties are in nursery tests and have proven more hardy even than Minturki. The problem is to produce the hardiest possible wheat, which also excels in yield and milling quality. This work is now cooperative between the Minnesota Experiment Station and the federal department of agriculture. Central and substation men are cooperating and before many years it seems likely a variety that is even better than Minturki may be developed.—H. K. Hayes, division of farm crops and farm management, University Farm, St. Paul.

### SEES GOOD YEAR FOR POULTRY MEN

Prices of eggs are lower than a year ago, but N. E. Chapman, poultry specialist at University Farm, foresees a steady demand and much higher prices later in the year and believes that poultry keepers should be encouraged to grow as many chickens this year as possible.

"Eggs are now going into storage," says Mr. Chapman, "at 22 to 25 cents a dozen, or about one-half the price paid at the corresponding time in 1920. This should not discourage. Let the grower remember that feed costs are lower and expenses in other respects lighter."

During the war, Paul Mandeville of Chicago, an egg marketing specialist, was called upon by the United States food administration to prepare a brief on the cost of marketing eggs, in order that the government might determine what was a reasonable profit on storage goods. After an exhaustive study of all the processes required in storing and marketing eggs, Mr. Mandeville reported that the expense of handling eggs put up in April and withdrawn from storage and sold in November was \$5.97 a case or approximately 20 cents a dozen.

"On this basis," says Mr. Chapman, "eggs going into storage now will undoubtedly sell for 40 cents or more a dozen next fall. When storage eggs retail at 40 to 50 cents a dozen, fresh eggs should sell at 60 to 75 cents a dozen. This is a fair price for the producer when the low price of grain is taken into consideration. If the efforts of poultrymen to put an embargo on foreign eggs are successful, the prospects will be even better for the American poultryman."

### LIME NEEDED FOR BLUEGRASS LAWNS

Kentucky bluegrass is the chief lawn grass in Minnesota, says A. C. Arny, in charge of Minnesota university farm crops, because experience has shown that it produces the best sod and gives the best appearing lawn of any grasses grown for the purpose. Mr. Arny points out that bluegrass grows best where the lands are of limestone origin and the soils are not acid. He says:

"In order to get the best results with Kentucky bluegrass in Minnesota, the soils on which it is grown should be alkaline in reaction. This can best be brought about by the application of lime—either crushed limestone rock or air-slaked lime. Where new lawns are being made, these materials may be worked in with the soil. Where it is desired to apply the lime to old lawns, it may be scattered on the surface and raked in."

"Recent publicity given to making the soils of lawns acid in order to keep down weeds is not practicable in Minnesota where it is desired to use Kentucky bluegrass as the lawn plant."

### HOW TO COMBAT "T-B" OF POULTRY

Preparations which guarantee to cure tuberculosis of poultry are pronounced frauds by those who have made a thorough study of this disease. Once the fowl is infected there is no known cure. The poultry keeper must concern himself with preventive measures.

"There are two ways in which the disease may be eradicated," says Dr. W. A. Billings of the division of veterinary medicine at University Farm. "If the flock is small and not of great value, and if several birds have died or are affected, it seems the part of wisdom to destroy the whole flock and begin over again. If the flock is large or valuable, the birds should be examined carefully and those found diseased weeded out. Some may be missed on the first examination, but may be observed later when the symptoms are better developed. Keep at the fowls continually and clean out and disinfect their house at least once a week. The young birds are easily infected and should not be permitted to run with the older ones. After the first general culling watch the rest and, as soon as one appears to be diseased, isolate it, and then, if it develops further symptoms, destroy it."

Dr. Billings says it is possible to wipe out the disease if it is fought systematically and thoroughly. Good sanitation is necessary for the health of the fowls. The interior of the poultry house should be scrubbed out with any good disinfectant and the walls whitewashed. Extra care should be taken in keeping floors clean and free of infection.

### LANDLORD, TENANT TO GET TOGETHER

A better understanding between farm landlords and tenants in the matter of making farm leases is urged by William L. Cavert, farm management demonstrator, University Farm, in a letter to Minnesota county agents. Mr. Cavert believes that the coming summer will be an opportune time to hold meetings of owners and tenants for the purpose of encouraging a better system of farm leases. Such meetings, he says, should be held prior to contracts, and the latter part of June or early July would be a suitable time, he finds, in many localities.

### PRIZES OFFERED FOR BEST FLOCK

The Range Poultry Association of northern St. Louis county is offering \$50 in cash prizes for the most productive farm flocks in that territory this year. Twenty-three poultry co-operators have promised, says Anna-bell Campbell, poultry specialist, to keep accurate poultry records. The women and children of the range country are taking a lively interest in poultry keeping, and the range association has elected a woman poultry grower as vice president. Northern St. Louis county ought to show real advancement in poultry work this year.