

Entered as second-class matter January 15, 1920, at the postoffice at St. Paul, Minn., under Act of July 16, 1891.
Acceptance for mailing at special rate of postage provided for in section 1103, Act of October 3, 1917, authorized July 29, 1918.

EDITOR'S COLUMN

Death of Mrs. M. J. McGowan

Many friends at University Farm were grieved to hear of the death of Mrs. M. J. McGowan, wife of the editor of the Appleton Press. Mrs. McGowan was 31 years of age and leaves one son besides her husband. She was prominent in various public enterprises and causes. Until illness forced her resignation, she was president of the Appleton auxiliary to the American Legion. Mr. McGowan was attached to the Office of Publications here for part of the war period, and he and his wife were residents of the St. Anthony Park district.

Rushford Editor Proud of Town

The Tri-County Record of Rushford is proud of its town. Recounting a compliment which was paid it by a touring party of business men, the Record says it is a fact that one can travel far and in many directions and not find a better kept little city than Rushford. "Let us all cultivate a booster's spirit," says the editor, "and make every citizen glad he lives right here in Rushford." This is certainly the right spirit; citizens imbued with it can make the whole town shine.

Publishers Are Hosts at Dinner

To promote a better spirit of cooperation among the business interests of the place, editors and publishers of Grand Rapids were hosts at a dinner to business and professional men. The "headliner" for the evening was Ludwig I. Roe of the Montevideo News, who gave an address on "Community Merchandising." This was followed by an animated discussion. Paul S. Kinney of the Alexandria Citizen-News and Judge Stanton were other speakers of the evening.

Farm Trespassers Scored

Mrs. Bess Wilson, editor of the Redwood Gazette, very properly censures town people who drive through country districts and raid the farmer of his tame and wild fruit and other products. "Everything that grows on a farmer's farm belongs to that farmer," is the way the Gazette puts it. "To take even wild fruit without his permission is as much a misdemeanor as to take his corn, potatoes or chickens."

Strong for Dairying

The Bemidji Daily Pioneer says the cow is the future salvation of northern Minnesota. This seems to be the thought also in the minds of most people, for bankers and many others in leading business pursuits are spending money to stimulate interest in the dairy.

"Own Your Own Home"

An "Own Your Own Home" editorial from the pen of J. C. Morrison, editor of the Morris Tribune, has been widely reprinted by editors of Minnesota, indicating that North Star state editors believe in the home and will fight for it to the last man jack. Had it space, Farm Press News would also reprint the editorial.

Kiwanians Honor Mitchell

H. Z. Mitchell, one of the leading spirits of that excellent all-around paper, the Bemidji Sentinel, has been appointed lieutenant governor of the tri-state district of Kiwanians. Bemidji people see in the appointment good prospects that the Kiwanians will some day hold their convention in the Beltrami county metropolis.

Advertising Helps to Make Good Town

The Hopkins Enterprise says there are two important things that go toward making a good live town. One is persistent, thorough and attractive advertising and the other is backing up the advertising with performance. "There is no use advertising if you haven't the goods," says the Enterprise, "and there is no use having the goods if you don't advertise them."

Print Shop Notes

V. E. Fairbanks, formerly city editor of the Mower County News at Austin, has gone back to the St. Paul Pioneer Press, with which he was connected last year. Carl L. Weicht, new city editor of the News, is doing good work.

Holmer B. Hanson, the new editor of the Morton Enterprise, says he is prepared to give the community as good a paper as it deserves. It appears to be up to the community "to show" Holmer.

The winter meeting of the Northern Minnesota Editorial association will be held in Red Lake Falls.

ORCHARD AND GARDEN

September 15 to 22.

Clean up the garden, remove and burn all weeds and trash. They are splendid harbors for insects over winter.

Celery banked with earth late in the fall seems more palatable than where boards are used. Do not bank when foliage is at all moist, as this will aid decay.

Branches of the Wahoo or Burning Bush make excellent bouquets for the table.

See that the grass is pulled away from the base of small trees. Better put wire protectors about them so mice or rabbits cannot injure them during the winter.

Save seeds, fruits and ornamentals. Either plant them at once in very sandy soil or mix with sand and store over winter, planting in good garden soil as soon as the land can be worked easily in spring.

Gladioli are easily kept over winter in the vegetable cellar. After the first frost cut them off a few inches from the ground, dig, and place in a convenient place where they will not get wet. When dry, store in the vegetable cellar.

The hard maple, sumac, hazel, and other shrubs and herbs are taking on their fall colors now. These, with the fruits of our wild grape, bittersweet, highbush cranberry and snowberry make a trip in the field a pleasure.

Have you laid in a supply of walnuts, butternuts and hazel nuts for winter use? There may be a few on the trees yet, although the squirrels have been busy.

Trees and shrubs may be set in autumn, but as a rule it is better to wait until spring. Large trees may be moved with a ball of frozen earth to advantage late this autumn.—Le Roy Cady, associate horticulturist, University Farm, St. Paul.

ORCHARD AND GARDEN

September 22 to 29.

Don't neglect to plant a few tulips in the garden this autumn. They will be reasonable in price and of good quality. All kinds of tulips are worth while.

Purchase a few good, firm bulbs of daffodils, hyacinths, etc., for growing in pots or boxes in the house. The bulbs should be planted about three inches deep.

Strawberries and garden perennials will soon need to be covered. Good clean straw is the best material.

Cannas should be dug, the tops cut back to about four to six inches from the bulb and stored in a warm, airy storage cellar. Do not allow them to become too dry or to wilt.

Where only a few cabbage are to be stored it is a good plan to wrap the heads in newspaper and put them on shelves in a cool cellar.

Pumpkins and squash should be stored in a cool, dry place. If stored in a hot place, they will lose weight quickly. Keep them from frost.

When digging the gladiolus bulbs, save the bulbets attached to the large bulb and plant them next season. It may take two or three years before they bloom, but it is a good way of increasing gladiolus stock.

Now is a good time to organize a community study club. Some of the meetings might well be devoted to a study of garden flowers, shrubs and vegetables. "Better Home Surroundings" is a topic that should be of interest to all.

As soon as the cannas, dahlias, gladioli, etc., have been killed by the frost, dig and store in a frost-proof place that is neither too dry nor too moist. The bulbs must not shrivel or start into growth. It is often a good plan to cover them with dry sand or earth.

Prune the grape vines as soon as the leaves fall. They will then be ready to cover with earth.

Do not go too far for trees and shrubs for ornamental planting. The middle west has a great variety of materials for use that are as good, or better, than are found east.—Le Roy Cady, associate horticulturist, University Farm, St. Paul.

FARMERS CAN UNITE AND SAVE ON SILOS

Twenty farmers in a Minnesota community not long ago wanted twenty silos for their twenty herds. They banded together and got them through their local dealer at a saving of approximately \$100 on each because the agent could afford to sell twenty silos on a much smaller margin than he could sell one. Several silos of any of the standard types can be built more cheaply than only one. This is especially true of cement silos where either forms or molds for making the blocks must be used. A set of forms can just as well serve for ten or more silos as for one, and materials can always be purchased more cheaply in large quantities than in small lots.

ALFALFA BUILDS SOIL, SAVES ON FEED BILL

Concentrated feeds, especially those rich in meat and milk making protein, are becoming expensive.

Grow legumes, alfalfa and clover hay are high in protein. They can readily be grown on the farm. High priced feeds need not be purchased, for clover and alfalfa can be used to supplant a goodly part of the grain ration. Alfalfa is superior to clover in this respect.

Minnesota soils need nitrogen.

Grow legumes. Non leguminous forage crops exhaust the soil. Legumes add fertility to the soil. They add nitrogen. Timothy does not. Legumes add vegetable matter and mellow the soil. The roots penetrate the subsoil, breaking it up, deepening it and aiding good drainage.

Grow legumes. Whereas timothy yields on the average about 1.4 tons per acre, clover yields 1.8 tons and alfalfa 2.7 tons. On the basis of a return of \$7.57 an acre for timothy and \$19.46 for alfalfa, this means an increased income of \$11.89 for every acre of alfalfa that replaces an acre of timothy.

Legumes spell production, profits and prosperity. Grow them.

POTATO CULLS SENT TO MARKET CUT DOWN RECEIPTS OF GROWERS

The impelling need of an effective potato grading system in Minnesota is brought out in strong light by figures and estimates made by university agricultural extension and state department men. On a 700-bushel or single carload shipment of "field run" from Red river valley points to Chicago, inspection showed that 10 per cent, or 70 bushels, were culls. Expenses sustained by the Minnesota farmer in marketing these rejected potatoes were:

Hauling, 5 cents a bushel.....	\$ 3.50
Cost of 35 sacks.....	1.00
Local warehouse charges.....	3.50
Freight from Red valley to Chicago	20.00
Loss on feed value on farm.....	7.00
Loss on remaining 630 bushels because not graded.....	63.00
Combined loss on single carload..	\$98.00

At this rate the estimated loss of Minnesota potato growers on 20,000 cars would be approximately \$2,000,000. Potato growers should attend the grading schools or write to University Farm or the State Department of Agriculture, St. Paul, for full instructions.

PAYS TO KNOW YOUR OWN SEWING MACHINE

"An important step towards greater efficiency in sewing is a more adequate understanding of the sewing machine, which will result in using quicker methods of work," says Miss Eunice Ryan, clothing specialist with the agricultural extension division of the university. "To many women the box of machine attachments means very little more than equipment which comes gratis. These attachments when properly used will save time, money and produce better workmanship.

"One half day's shopping will tell the seamstress what trimming is in style; whether binding, tucking, cross-tucking, couching, or braiding it can be done with her machine. Another useful attachment is the cutting gauge; this is not used on the machine but on the shears. Its purpose is to cut narrow bias or straight pieces evenly.

"French seams can be made with the hemmer. This requires but one length of thread for the seam, and also insures the seamstress that there will be no raw edges on the right side of the garment. The binder is a time saver in making buttonholes, binding seams or edges, also in trimming as folds and piping."

FARM HOMES SHOULD HAVE RUNNING WATER

Miss Shepperd, household engineering specialist of the university's agricultural extension service, reports that in 18 Minnesota counties 25 families have installed water carrying and sewage disposal systems and six other families have systems planned or under construction.

Each of these water systems incorporates principles and methods of installation advocated by the state specialists in household and rural engineering.

Some kind of water system is a necessary household convenience and the simplest types are inexpensive enough to be available for every farm home.

This is a good time to be considering the installation of a water system and to consult the specialists at University Farm.

COOL, CONTENTED COW GIVES BEST RETURNS

"Whatever the dairyman can do to keep his cows cool and comfortable in summer will more than pay for itself in a bigger cream check," said T. W. Gullickson of the division of dairy husbandry at University Farm, at the close of a detailed investigation into the effects of atmospheric conditions upon milk production.

Mr. Gullickson studied production records of 553 advanced registry Holstein cows kept by the university; 764 lactation periods of advanced registry Holsteins of other breeders in the state; 125 Register of Merit Jersey records made in Minnesota; and lactation periods of 1,318 advanced registry Guernseys in various sections of the United States. Then he studied detailed reports of daily weather conditions during each period as given in the records of the weather bureau.

By careful comparison of daily milk records with daily weather statistics he found that when the temperature goes up, the fat content goes down, so that on hot days the fat test is lower than on cool days. Humidity or the moisture in the air showed a slight effect, causing a lowered fat test when high. But each alone had a comparatively small effect until combined, when a decided difference resulted from high humidity and high temperature, characteristic of June, July and August weather.

Averages of the whole lot of 2,760 cows showed a low temperature-low humidity combination to give a fat test of 4.490 per cent; a high temperature-low humidity combination, 4.409; low temperature-high humidity, 4.437; high temperature-high humidity, 4.298.

But little variation took place in the winter, Mr. Gullickson found, because of the fact that cows are protected from outside weather influences.

REAL GAIN MADE BY EARLY FALL PLOWING

Weeds materially reduce the yields of grain, particularly on farms in Minnesota. Early fall plowing aids very much in holding weeds in check and eradicating them. Plowing biennial and perennial weeds under early checks their growth; if when they show above ground these parts are destroyed, real progress in eradication may be made during the fall months.

Early fall plowing may conserve the moisture already in the soil and puts the fields in condition to take up readily any rain that occurs during the autumn. Various insect pests harmful to crops are largely controlled by early fall plowing, due to disturbance in their more or less dormant stages or to actual exposure above ground.

In preparation for the seeding of fall grains, early plowing has the advantage over plowing just before sowing in that it provides a firm seed bed in which the seed should germinate immediately and the plants make a steady growth from the start.—A. C. Arny, Minnesota Experiment Station, University Farm.

SURVEY PLANNED FOR RED VALLEY COUNTIES

At the request of manufacturers and drainage engineers interested in the development of the Red River valley, a soil and drain water alkali survey will be undertaken in 18 northwest Minnesota counties by the cooperative drainage laboratory at University Farm, according to D. G. Miller, senior drainage engineer of the United States Department of Agriculture, in charge. F. V. King, senior drainage engineer of the United States Department, will make the field investigations. Similar studies in 26 southwestern Minnesota counties were made in 1919-1920.

"We hope by these studies to define the areas which seem to indicate an excess of salts in order to facilitate the selection of proper drain tile materials," said Mr. Miller. "This is a problem of considerable importance in Minnesota."

Counties to be included in the project are Roseau, Kittson, Marshall, Pennington, Beltrami, Clearwater, Red Lake, Polk, Norman, Mahanomen, Becker, Clay, Otter Tail, Wilkins, Douglas, Grant, Traverse and Stevens.

UNIVERSITY MEN WILL DRAIN AITKIN TRACT

A 30-acre tile drainage system, designed, laid out, contracted for and constructed under the direction of H. B. Roe, in charge of the drainage section of the division of agricultural engineering, will be the first project of its kind in Aitkin county.

The system will be installed on the farm of Theodore Arens, near Hill City, as a cooperative demonstration project under the auspices of the engineering division. Completion is expected within sixty days.

GRADING OF POTATOES MEANS A BIG SAVING

The agricultural extension division of the university is cooperating with the State Department of Agriculture in holding one-day potato grading schools in leading potato growing districts over the state. At these meetings, which are attended by growers, shippers, county agents and any persons interested, representatives of the state department and the extension service outline the critical potato market situation and give practical demonstrations of the methods used by state and federal inspectors in grading potatoes for the market.

A potato crop survey of the United States shows a surplus of eighty million bushels this year. According to H. J. Hughes, director of markets of the state department, fifty-seven million bushels of this excess is in the northern belt of the potato growing states. This year's crop represents a shipping surplus of about 40 per cent over the production of 1921.

"Under these conditions," says Mr. Hughes, "the only hope for the prevention of a disastrous price break is the rigid grading out and keeping at home of all inferior quality potatoes. Previous experience has shown that the culling out of one bushel in 10 will make the average crop grade United States No. 1 and give the remaining nine bushels a much better chance on the market, at a price amounting to more than the entire 10 bushels would ordinarily sell for. In seasons of oversupply, like the present, it is always the poor ungraded carload of potatoes that is found at the bottom of the price heap."

Mr. Hughes estimates that the losses to Minnesota growers last year from lack of grading amounted to the enormous total of \$2,000,000 because of extra costs of handling, unnecessary freight, and the loss on the average price of good stock in ungraded shipments.

SILAGE CUTS COSTS, INCREASES PROFITS

"If you want to make money feeding baby beeves, feed silage." This is the conclusion reached by Prof. W. H. Peters and Prof. N. K. Carnes of the division of animal husbandry at University Farm upon the close of a recent experiment in feeding 60 head of baby beeves.

"If you want to make money in dairying, feed silage," says Prof. A. B. Rayburn, of the dairy division of the university, who manages the University Farm herd.

Dairymen and beef men alike find silage an essential part of a profit making health producing ration. The best herdsmen find it indispensable. Here's why, as given by feeding authorities: Silage furnishes a high quality succulent feed at a reasonable expense for any desired season of the year. For winter feeding it is far cheaper than roots and fully as efficient, except possibly in the case of animals being fitted for show and dairy cows on forced test. In summer, silage provides succulent feed with less bother and expense than soiling crops.

Feed wastes mean losses. When crops are properly preserved in a silo less of the nutrients are wasted through fermentation than are lost when the forage is cured as hay or dry fodder. Furthermore silage is eaten practically without waste, while from 20 to 35 per cent of dry corn fodder, even if of good quality, is usually wasted. The use of silage thus permits the keeping of more stock on a given acreage.

Frosted or immature corn which would otherwise entail loss can be saved by "silaging."

"U" PUTS OUT 10 NEW FARM BUILDING PLANS

Ten new farm building plans prepared by agricultural engineering division men at University Farm are now available to Minnesota farmers, according to H. B. White, who is in charge of the farm buildings section of the division. The new plans are:

201. Storage cellar
202. Gable roof hog house
203. Farmhouse, first and second floors
204. Farmhouse, front and side elevations
205. Gambrel roof barn, 36 feet wide
206. Wool box
207. Stitching clamps
208. Implement shed 24 by 60 feet
209. Shop and garage
210. Implement shed 18 by 48 feet.

These plans have been placed on file with county agents for reference. Copies may be had from the Division of Publications, University Farm, St. Paul, at 10 cents per sheet or \$3.50 per hundred sheets. A complete set may be obtained for \$3.50