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ORCHARD AND GARDEN

August 1 to 7

A cover crop should be sown now and cultivation of the orchard should stop.

The cucumber vines will continue bearing if you keep the cucumbers picked.

Carrots and beets sown the early part of July give good tender roots for winter use.

Seeds of early ripening trees and shrubs should be planted as soon as gathered.

Cabbage, turnips, or rutabagas may be planted on the old strawberry bed.

The asparagus bed should be cultivated as long as it is possible to get between the rows readily.

Early apples will soon be ripe. If any are to be marketed, see that they are well-graded and put in neat packages.

Cover some of the joints of squash, melon, and cucumber vines with earth. This will cause the plants to send out new roots and help prevent destruction by the stem borer.

The hardy pinks, shasta daisies, and double achillea are among the best perennials for cut flowers. The shasta daisy is hardly a true perennial as it seldom lives more than two or three years.

Bulbs for fall planting may be ordered now. Try a few Darwin tulips this year. They are planted at the same time as May flowering sorts—about October 1—and bloom much later in the spring.

The European war is causing some of the garden ornaments to be sold from European estates. Many of these are being bought by Americans.

The florists of Cleveland, Ohio, contributed carnations, roses, and peonies so that every army officer and enlisted man that went to the border wore a flower in his buttonhole, and carried one in his gun barrel. Flowers were also scattered along their line of march.—LeRoy Cady, associate horticulturist, University Farm, St. Paul.

ORCHARD AND GARDEN

August 8 to 15

Budding of apple, plum, and ornamental trees may be done now.

Early dahlias are sometimes used in window boxes. Their flowering there is rather uncertain.

Do not allow sweet peas, pansies, or gladioli to suffer for water at blooming time.

See that the dahlias are tied to stakes, and if there are many shoots it is well to cut some of them off.

A mulch of manure about the roses and other shrubs late in July helps to hold the moisture and supplies plant food.

Cut out the old raspberry canes as soon as they are through fruiting. It is often a good plan to take out part of the suckers as well.

Geraniums and other house plants may be lifted from the garden early in September and put in pots or window boxes for winter use.

Seedlings of perennials such as columbine, delphinium, etc., may be transplanted to seed boxes and put in cold frames over winter.

One of the most attractive perennials at University Farm in the latter part of July was the delphinium or larkspur. This comes in all shades of blue, from light to very dark.

Gladioli will soon be in bloom. Give plenty of water when the buds show well. To keep the flowers it is best to cut them when the lower flower is just opening. Remove the faded flowers and cut off an inch or two inches of stem each day.—LeRoy Cady, associate horticulturist, University Farm, St. Paul.

PARCEL POST MAY AID FARM MARKET

How to enable the farmer to get a little more for his product, at the same time supplying it to the consumer for a little less than he now pays, is a problem that the Postoffice Department is investigating. The investigation is provided for in the appropriation bill which calls for three or more separate demonstrations of the efficiency of the parcel post system in distributing farm products among consumers.

The movement for the use of the parcel post in distributing farm products was started by the Southern Commercial Congress. There are nine parcels that go from the city to the country to one that goes from the country to the city.

The National Association of Commissioners of Agriculture believes that the government's machinery can be used profitably in selling farm products directly from the farm to the consumer, just as it is used now to distribute supplies from mail-order houses to farms.

FARM BANKS MAY CUT INTEREST RATE

To lend money to farmers on the security of real estate, which loans may be repaid on the amortization plan, at a rate of interest not higher than 6 per cent, is the purpose of the federal farm loan banks, established by the Federal Farm Loan Act, recently passed by Congress and signed by the President. If these banks could do all the farm-loan business in Minnesota they would reduce interest charges at least \$1,168,000 a year. There are about \$146,000,000 worth of farm mortgages in the state and they bear an interest rate averaging 6.8 per cent.

Loans will be made by the banks to local organizations called national farm loan associations. These associations must be made up of at least ten farmers who desire to borrow or have borrowed money from the farm-loan banks. To get a loan, a man must be a member of one of these associations. When he is admitted to the organization, three men appraise the farm that he offers for security and the secretary-treasurer of the

Minnesota's prosperity both for the coming winter and for the WINTER FOLLOWING depends to a considerable extent upon the corn crop of this year.

From the corn crop of this year must be selected the seed corn for next year's planting, and the character of that seed corn will determine largely the quality and quantity of next year's corn crop.

If the seed corn for next year is selected carefully and at the right time, it will be of the right character, and much will have

been done to insure next year's corn crop.

To get every farmer who grows corn to select his seed corn for next year carefully and at the right time, means that the attention of every farmer in the state must be called to the subject of seed corn selection, between the present time and mid-September.

The surest way to direct the farmers' attention to the urgent need of seed corn selection at the right time, is through the press of the state.

used. It does not add to the farmer's bank account to overfeed the cattle and expect the hogs to dig the waste out of the manure pile. Feeding experiments commonly used, before this, from 10 to 20 pounds of grain per day during the fattening period. Mr. Haecker never succeeded in feeding 11 pounds. To feed a steer from the time he weighs 100 pounds until he weighs 1,200 pounds, according to the tests, requires on the average the following amounts of feed: Grain, 3,288.2 pounds—consisting of approximately 18 bushels of corn, 5 1/2 bushels of barley, 9 1/2 bushels of oats, 768 pounds of bran, 645 pounds of oil meal and 323 pounds of middlings; 2,890.5 pounds of hay, and 3,240.9 pounds of silage.

The grain cost for the five chief groups of steers averaged for the first year \$14.32 a head and for the second year \$39.92, making a total cost of \$54.24 for the grain feed for a 2-year-old steer finished for market.

A small daily gain was found to be most profitable. A gain of a little less than two pounds a day was kept up on these steers. It gave better results than heavy gains for a few weeks that could not be maintained.

The cost of producing additional gains increases as the cattle become heavier. The tests show that the cost of feeding calves to a weight of 100 pounds is about 10 cents a pound. From 200 to 300 pounds the feed costs 4.9 cents a pound. A pound in the 900- to 1,000-pound period costs 9.3 cents and in the 1,400- to 1,500-pound period it costs 15.4 cents.

It is believed at University Farm that when less grain is fed and more roughage given to beef cattle the production of beef in Minnesota will become more common. Heavy grain feeding is wasteful and increases the cost of the cattle without making the product any bigger or any better.

TOO MUCH GRAIN FED IN GROWING BEEF FOR MARKET

That beef production will pay in Minnesota under rational feeding is the opinion of T. L. Haecker of the section of animal nutrition, University Farm, St. Paul, after nine years of experiments with fattening cattle. The chief method of increasing the profit under Mr. Haecker's feeding system is to reduce the amount of grain nearly half and to increase the amount of roughage.

The feeding experiments started at University farm in 1907 dealt with 184 beef-bred steers. These were fed in eight different groups under varying conditions. In every case the steers more than paid for the feed given them. Steers that were stall fed all their lives brought more at market prices than their feed cost. Steers run on pasture for two seasons brought from \$20 to \$25 more than the cost of feed.

Mr. Haecker says that nearly twice as much grain is given under ordinary conditions of beef feeding as can be

TO MINNESOTA EDITORS

Will you help, Mr. Editor?

The Office of Publications at University Farm, from the present time until mid-September, will furnish you brief items, either through the Press News or otherwise, on the advantages and benefits of selecting seed corn from standing corn in the field before time for killing frosts. If you will use these, you will help the cause of corn and, therefore, of prosperity.

AGAIN, WILL YOU HELP, MR. EDITOR?

possible to the place where silage is to be fed and should be on the least exposed side of the barn.

One hundred tons of silage will feed twenty-five head of stock for 200 days.

A silo 14 feet in diameter and 35 feet high will hold 100 tons of silage.

Any kind of a good silo is a valuable piece of property on the farm where livestock is to be fed.

SILO HELPS TO SAVE CORN CROP

Most farmers feel more or less anxiety about their corn crop at this time of the year, but those who are the least concerned are those on whose farms stand silos. The silo makes it possible to save a corn crop that, owing to immaturity or early frosts, might be almost wholly wasted.

The farmer, therefore, who has been thinking of building a silo should get into action, and the man who has not been thinking of the silo should think and act promptly. Because many farmers are thinking "silo" these days the following points as to good silos are worth keeping in mind:

The walls must be airtight.
The walls must be smooth inside.
The best type of silo is round.
The roof should be waterproof.
The substances should be substantial enough to stand great pressure.
The cost should be from \$2 to \$5 for each ton of capacity if the total capacity is to exceed 100 tons.
A silo should be placed as near as

PICK OUT SEED SHOCKS IN FIELD

The very best time to get good seed is when it is in the making. Good seed is like good live stock—best when it comes of good ancestry and is produced under favorable conditions. So it is that some parts of the fields are better than others for the production of mature, well filled, sound seed; while other parts will produce a less valuable product. Looking over the various parts of the field before cutting, one may select the parts of the crop to be handled separately for the next year's seed supply. No extra work or "fussing" will be necessary before cutting. The field may be cut as a whole and shocked, but extra care is necessary in setting up shocks in the "seed" part of the field. A twelve-bundle shock with two cap sheaves will withstand unfavorable weather and protect the grain.

As soon as the grain is field-dry it should be stacked or threshed. The seed grain should be put in a separate stack and the cap sheaves should not be allowed in with the other parts of the shocks. They may go in with the feed or sale grain. When threshed the seed grain should be stored separate from other grain, thus keeping it unmixing. When thus kept separate from field to bin it will be ready at any time for the last analysis—the fanning mill—before sowing.

It is not an easy matter always to judge the increased profit that comes from saving seed grain in this manner. Climate, soil, and diseases have much to do with the apparent physical condition of the crop, but in the long run, such saving of seed will give much stamina to the variety and increase its yielding capacity.—C. P. Bull, University Farm, St. Paul.

WELL-FED BABIES RESIST PARALYSIS

Infantile paralysis is less frequent among babies fed upon the mothers' milk than among babies fed artificial mixtures. This is shown by statistics compiled by the Minnesota Public Health Association. The reason for this, says Dr. I. J. Murphy, executive secretary of the association, is that breast-fed babies have a greater resistance to disease, being therefore less subject to infantile paralysis germs as well as to all other infectious diseases.

While infantile paralysis may attack adults, most cases are found among children from 1 to 10 years old. Flies may carry the infectious material of this disease, as well as of many other diseases to which children are susceptible.

If infantile paralysis, or any other severe illness, is suspected, Doctor Murphy says, the child should be given the benefit of the doubt, and a physician should be called as soon as possible. Proper treatment in the early stages may not only prevent a fatality, but it is absolutely necessary to prevent permanent paralysis.

If the physician is not sure of the diagnosis, suspected cases should be handled as prescribed by the State Board of Health regulations, which provide that all other children, visitors, pets, insects, etc., be excluded, and that the discharges from the nose, throat, and mouth be received in cloths and burned. All other discharges must be properly disinfected and the access of flies prevented.

MORE EXHIBITS ARE READY FOR FAIR

County fair boards and other organizations may get exhibits from the Minnesota Public Health Association including:

1. Infant welfare exhibit—containing thirteen panels 18 by 28 inches.
 2. Tuberculosis exhibit—containing twenty-four panels 12 by 18 inches.
 3. Adult health exhibit—containing twenty panels 22 by 28 inches.
 4. Oral hygiene exhibit—about the size of the tuberculosis exhibit.
- All these may be sent by parcel post. They will be sent free to any organization requesting them.

Dr. I. J. Murphy, executive secretary of the association, says that the number of requests from county fair boards last year was greater than could be taken care of. This year, however, the association has four times the amount of exhibit material than was available last year and will get more if there is a demand for it. A nurse may be had on request for demonstrations and lectures.

The farmer is good enough and often rich enough to ride in an automobile whenever he wants to, but the roads are not fit to ride over much of the time.

EARLY PLOWING INCREASES YIELD

Repeated trials have shown that early fall plowing gives much better conditions for a crop of grain the following year than late plowing gives. While August is a dry, hot month and other farm work presses, it is advisable to do as much plowing as possible. On clean land no further treatment is needed. On weedy land the August plowing should be followed by occasional disking or harrowing, or by reploting in October.

Such treatment destroys many of the weeds and pulverizes the soil, so that good supplies of plant food are available during the next season. In addition, it gives a longer plowing season and a chance to do better work. Early plowing and good plowing are important steps in getting better than the average yield.—Andrew Boss, University Farm, St. Paul.

NEW RYE SEED MAY RAISE ACRE YIELD

There are two main reasons why the yields of rye in Minnesota are not larger. First, the seed used is poor; second, nearly all rye is disastrously afflicted with ergot, a disease common to all cereals and to many grasses. The rye crop is generally considered a poor man's crop and a poor-land crop, so that it is not given any attention and seldom gets a chance to show what it is really worth.

The remedy for the low yield lies in the use of seed of an improved variety and the elimination of the greater part of the ergot. Minnesota No. 2 rye is a pure-line selection made at the Minnesota Agricultural Experiment Station. It possesses high yielding qualities, the ten-year average being 39.8 bushels. Seed of this variety of rye is available in small quantities for those who wish to get started with the best seed for Minnesota conditions.

Getting rid of ergot is not such an easy proposition, because rye-growing soils are infested with the germs of the disease. Furthermore, the disease is transmitted more or less from the common grasses to rye and from rye to the grasses. Fields in which 50 per cent of the crop was infested with ergot have been found. It is dangerous to feed stock ergoty rye.

You can get rid of it. Why not do so then? Write to C. P. Bull, University Farm, St. Paul. He will tell you about seed plot methods of seed control and of improvement methods.

There are a number of good silos being put up over the state now, but the number is not large enough.

If you have an old worn-out binder, sell it and get a new one. A day lost in getting repairs may be worth \$40 or \$50 to you this month.

It is cheaper to buy a good supply of bolts and nuts than to spend fifteen minutes each time one is wanted taking it out of some other piece of machinery.

A woman who does the housework for an average family walks as far as the distance around the world in six years. She can be saved nearly half that walking by a properly arranged kitchen.