College of Agriculture | Minnesota Experiment Station | Farmers' Institutes | School of Agriculture

UNIVERSITY FARM PRESS NEWS

Published Semi-Monthly by the University of Minnesota, Department of Agriculture, Extension Division.

VOL. VIII | UNIVERSITY FARM, ST. PAUL, MINN., APRIL 1, 1917 | NO. 7

Entered as Second class matter January 15, 1910, at the postoffice at St. Paul, Minn., under the Act of July 16, 1891.

ORCHARD AND GARDEN

April 1 to 8

Zinnias make good bedding plants as well as cut flowers. They may be started from seed now.

Queen-of-the-Market asters are best for pot plants. They are also among the earliest for outside planting.

Cut out the old dead wood of the currants and thin out new shoots if they are thick. Leave no more than can have plenty of room to grow.

The following are good dahlias: Queen Wilhelmina, Snowclad, Sunshine, Cuban Giant, Grand Duke Alexis, W. W. Rawson, Delice, Jack Rose, Mina Burgle, Kriemhilde, Golden Gate.

Every farm home should have a good strawberry bed, seventy-five or more raspberry bushes and a few black, white, and red currant bushes. The black currants are thrifty and vigorous of growth. Red currants are sometimes a discouragement because the currant worm gets the leaves. This is easily prevented by spraying with paris green or arsenate of lead.—LeRoy Cady, associate horticulturist, University Farm, St. Paul, Minn.

ORCHARD AND GARDEN

April 8 to 15

Give cauliflower, cabbage, and celery plants plenty of air.

Has the orchard been sprayed yet?

Keep tulips covered until they begin to grow into the covering.

Plant peonies or rhubarb as soon as the ground can be worked.

Seedlings should have plenty of air and sunlight to keep them stocky.

Do not prune spring-flowering shrubs until after they flower. Those that flower in autumn may be pruned now.

Many seeds will germinate better and the plants from them will be much stronger if they are placed near the glass in a greenhouse or cold-frame.

The following are good varieties of peonies: Festive Maxima, Mons. Jules Elie, Marie Lemoine, Baroness Schroeder, and Felix Crousse.

Watch the hotbeds and cold-frames on warm days. A few minutes of hot sun on a hotbed will raise the temperature to the injury of the crop planted unless air is given.

Plums do well on sandy soil. Apples do best on a loam soil underlaid with clay. Many times a side hill may be made good use of for apples or plums.

Good annuals for cut flowers are marigolds, sweet peas, calliopsis, asters, scabiosa, petunias, snapdragons, nasturtiums, and zinnias.

The following hardy plants make good cut flowers, coreopsis, hardy chrysanthemums, delphiniums, Spanish and German iris, lupine, peonies, phlox, golden glow, sweet william, gaillardias. —LeRoy Cady, associate horticulturist, University Farm, St. Paul, Minn.

100 HIVES OF BEES ARE WORTH A FARM

One hundred hives of bees are worth as much as, or even more than, an 80-acre farm, says Francis Jager, chief of the division of bee-culture, University Farm, St. Paul.

For capital invested and labor required, adds Mr. Jager, bees are far the greatest money-makers one can keep on the farm. One hundred pounds is a fair average production under good management of the bee yard. At this rate 100 hives would produce 10,000 pounds of honey in one year. This, at 10 cents a pound, would give a return of $1,000 for one year.

None of this has to be used to pay for feed for the bees for all their food and honey come from the flowers of the roadsides, woods, and meadows. Further, little or no rent is required for the land, for the beehives can be placed along roadsides and in meadows where the bees have food at their very doors.

If a yard is needed for the bees, a quarter of an acre is more than enough for 100 hives. This should cost $1.50 as rent.

The only large expense is for equipment such as hives and supers, and this equipment will last a life-time. It can be supplied for $300. This means a yearly charge of only about $15. The bees can be obtained free by catching swarms in summer. Then by the use of purebred Italian queens, obtainable at the University Farm for 50 cents each, these swarms can be multiplied into a purebred apiary.

The total annual cost of the bees for one year then is less than $20 exclusive of labor. The actual labor required is worth $134 at the rate of $400 per year, for only one-third of the time of one man is needed, according to Mr. Jager, who finds that one man can easily care for 300 hives. This leaves a net profit of $846 for one year.

The 160-acre farms of Minnesota produce on an average, according to 1910 census reports, a labor income of $330 a year.

HIGH PRICES CREATE INTEREST IN BEANS

With common field beans like the navy, bringing from $6.50 to $7.50 a bushel, interest in the bean has greatly increased. Even under average conditions, however, with such beans bringing $2.80 a bushel, they can be produced at a fair profit, says A. C. Arny of the Minnesota experiment station.

Field beans can be produced to best advantage on loams or sandy loam, adds Mr. Arny. Clover sod has been found an excellent place on which to grow field beans. Since this is also a desirable place for corn and potatoes, in a rotation, beans can be substituted for corn or potatoes without changing the plan of cropping.

Seed should be purchased from reliable growers or seed houses and only the best hand-picked choice navy beans should be used. From 18 to 20 pounds of such seed is enough for each acre.

Fall plowing is best for bean-growing, but if spring plowed ground is used it should be plowed early in April to allow the ground beneath to become firm before the beans are planted. Fall plowed ground should be disked once early in April. The soil should be mellow to a depth of three or four inches.

Planting should be delayed until danger of frost is past. In Minnesota it is advisable to wait until after the corn has been planted. From May 20 to June 10 according to latitude is the time to plant it. With moisture conditions favorable the seed need not be planted deeper than 1½ or 2 inches. The highest yields at University Farm have been obtained where the beans were drille! in rows 24 inches apart, one bean to each two, three, or four inches.

Enough cultivation to keep the crop free from weeds and the soil mellow should be given. Beans should not be cultivated when the leaves are wet with heavy dews or rain, if leaf diseases are to be avoided.

ANIMAL DISEASES COSTING MILLIONS

The annual report of A. F. Woods, director of Minnesota's Experiment Stations, just from the printer, calls attention to the fact that Minnesota annually loses millions of dollars through livestock diseases, and that the experiment stations have been waging a war of prevention to stop this loss. Furthermore, the report points out that preparations are being made to carry on an even more vigorous campaign.

The same kind of campaign that is being carried on against animal diseases will be carried on against plant diseases, and in favor of the upbuilding of Minnesota's farm soils.

Copies of the annual report may be had by addressing the Office of Publications, University Farm, St. Paul.

"BABY" PROGRAMS AID CHILD WELFARE

"The holding of baby or child welfare programs is a good way to induce communities to take official steps for the prevention of infantile paralysis, spinal meningitis, and other diseases so disastrous to babies and young children," says Dr. I. J. Murphy of the Minnesota Public Health Association.

May 1 to 6 has been designated as "Baby Week" by the Children's Bureau, but later dates may be used just as well by Minnesota communities. Programs for such meetings as are suggested may consist of short talks on child welfare by teachers, nurses, and physicians; compositions by children, demonstrations by "Little Mothers," and health playlets by children, etc. Many of the schools of the state are planning to hold appropriate exercises on Friday of "Baby Week."

Local committees may receive program outlines, literature, and exhibit material without charge, by addressing the Minnesota Public Health Association, Old Capitol, St. Paul.

THIS THE SEASON TO PRESERVE EGGS

This is the time of year to preserve eggs for home use. About half of the eggs of the whole year are produced during March, April, May, and June. Eggs laid at this season are the best for preserving.

Eggs to be preserved should preferably be infertile, and only a day old. They should also be clean, but not washed, as washing makes them porous allowing the solution to enter. The most successful and cheapest method of preserving is in water glass (sodium silicate). One gallon of sodium silicate, about 50 cents worth, will when added to 15 times as much water, which has been boiled and cooled, be enough to preserve 50 dozen eggs. The solution should be prepared and put in the vessels in a cool place, then the eggs added as they are gathered. There should be at least two inches of solution covering the eggs.

PHRASE IS "KNOT" IN DRAINAGE LAW

"The phrase 'for the public,' and a lack of understanding are the chief causes of trouble in carrying out the drainage laws," says John T. Stewart of the agricultural engineering department of the University of Minnesota.

No matter how many acres of land would be benefited by a short ditch through a man's land such a ditch could not be put in as a state project unless more than one man owned the benefited land, adds Mr. Stewart. If only one man owned it, the ditch would be said not to be "for the public," but if two men own it then it would be regarded as "for the public." This question has been brought up to the courts a good many times for decision and it is hard to tell just where to draw the line between a public and a private benefit.

A good lawyer who has had experience with contracts for drainage should be employed if a project is to use a good deal of money.

FARM GARDENS PAY HANDSOME PROFITS

The garden every year is becoming a more important part of the up-to-date farm. The reason for this is that more and more farmers are seeing in it a source of big profits. A half acre garden, for example, can give a net profit of about $45.

The farm garden, says R. S. Mackintosh of the agricultural extension division, University Farm, should yield enough vegetables to supply the table during the growing season and for canning for winter use. A circular letter recently prepared by Mr. Mackintosh, gives the amounts of seed required, tells how to plant, and adds other information of value. Those interested may obtain a copy of this circular by addressing the agricultural extension division, University Farm, St. Paul.

EDITORS FAVOR SIMPLER SPELLING

The Minnesota Editorial association at its annual meeting in February voted to recommend to the editors of the state the use of the simplified spelling of the following words: Tho, altho, thru, thruout, thoro, thoroly, thorofare, program, prolog, catalog, pedagog, decalog.

SHEEP MAKE GOOD HELPERS ON FARM

Sheep are good farm help. They will range a farm from early spring until late fall feeding off weeds and growths that other stock will not touch. A small flock will mow the orchard and keep down the weeds about windbreaks, fences and buildings. All of this is simply incidental "velvet" as the wool clip pays for the flock's keep. The mutton return is the main source of profit. Besides, the high value of farm land, which compels farmers to fence their acres for hogs and other stock, lightens the added expense for keeping sheep.

This year with wool at 10 and 15 cents a pound above normal prices and mutton higher than it has ever been, any farmer is assured handsome returns if he gives his flock reasonable care.

OPPORTUNITIES FOR THE SMALL FARMERS

Minnesota grown sorghum, soy beans, Grimm alfalfa, Canada field peas, navy beans, beet seed, and sweet clover are in large demand, because of their early maturity and other desirable characteristics. This demand opens the way to good profits for the careful Minnesota farmer, says C. P. Bull of the Minnesota Experiment Station, and it furnishes a splendid chance for the small farm, as care in selecting, planting, growing, harvesting, storing, and marketing can be given better by the manager of the small farm than by the manager of the large farm. It is mainly a problem of getting started right. In this the Minnesota Experiment Station is ready to lend assistance.

STANDARD WIDTHS FOR WAGON TIRES

According to traction tests made by the United States Department of Agriculture, described in Circular 72 of the office of the secretary, wagon tires should vary in width according to the loads they are supposed to carry. For the average farm wagon, the following table will be a safe guide:

Type of Wagon	Gross weight loaded Pounds	Width of tire Inches
1-horse wagon	2,000	2
Light 2-horse	3,500	2½
Medium 2-horse	4,500	3
Standard 2-horse	6,800	4
Heavy 2-horse	7,500	5

DAMP HOME MEANS DEATH TO CHICKENS

Great care must be taken to keep dampness out of the chicken houses of Minnesota this spring, says N. E. Chapman, University Farm. Waterways should be dug around chicken houses, so that the melting snow may run away from the foundation. If the walls are high and the floor of the house is a foot or more above the level of the ground, the capillary movement of the water being cut off by coarse gravel or cinders beneath it, a minimum of labor will be needed to keep the floor dry and comfortable for the flock. If, however, the walls of the foundation are low and the house is on level ground, there must be constant watching lest the water seep in from beneath, or run over the walls, and result in damp, soggy litter. Such conditions bring on colds, bronchitis, and roup. A temporary floor of boards on top of cement floors will prevent the dampness that results from the seepage of water.

The litter should be renewed very often, or it will become damp and foul resulting in disease and death. Cornstalks left in the manger, if cut up in short lengths, make fine litter for springtime—one of the best of all materials on the farm for the poultry-house litter for damp seasons.

Sneezing and rapid breathing in the flock, show that the hens are catching cold. Soon there is a watery discharge from eyes and nostrils. Give a purgative of Epsom salts, one tablespoonful to one gallon of water. Get the following prescription filled at the drugstore: Magnesium sulphate, 10 ounces; magnesium oxide, 1 ounce; sulphate of iron, 2 ounces; ground ginger, 2 ounces; flour of sulpher, 3 ounces; red pepper, ½ ounce. Mix thoroly and feed in mash at the rate of 1 teaspoonful to 25 hens. Wash eyes and nostrils with three per cent solution of boracic acid when watery discharge is seen. Separate those seriously affected from the rest of the flock.

CUT-OVER TRACTS GIVE GOOD PASTURE

The high price paid for forest products recently has led many farmers to cut-over a good deal of land and to cut close. Instead of letting the brush and debris remain a fire trap, the land cut-over should be cleaned up for pasture in 1918 and later it should be "stumped" and sown to crops, says M. J. Thompson, Northeast demonstration farm, Duluth.

As soon as the snow is off, the remaining brush and bushes should be cut off, picked up and burned with the scattered wood and logs, so that a section of a harrow can be driven among the stumps. Good seed is essential. Time should not be wasted on barn sweepings or cheap seed. Only three pounds of mixed clovers and three pounds of mixed grasses to the acre are needed if one buys live seeds. Remember, adds Mr. Thompson, that this pasture is worth from $10 to $15 an acre for producing butterfat so do not begrudge the extra pennies in buying seed.

Some men harrow the land but once. If you do this, harrow before rather than after seeding, but experience shows that both harrowings are needed. In order to get the seed thoroly distributed, here at the station we usually pace off the land and sow the seed acre by acre.

The land should be pastured lightly if at all the first season. This permits the setting of seed which in turn reseeds the pasture.

If possible, the seed should be in when only an inch or two of frost is out of the ground and before the heavy spring rains set in.

CARE OF PASTURE CUTS DAIRY COST

The cost of feeding the dairy herd in summer can be greatly reduced by giving to the pasture proper care and management, says H. H. Kildee, Minnesota experiment station. On about 98 per cent of the farms the pasture is the most neglected area, and yet on this very area it is possible to double milk production most easily.

By keeping the cows off until May 10 or 15, adds Mr. Kildee, by sowing a variety of grass seeds and by liberally applying manure, the Iowa experiment station carried from 45 to 48 cows on a pasture of 19½ acres, in addition allowing them from 6 to 9 acres of soiling crops. In spite of the limited acreage, these cows were fed an abundance of green stuff, while cows on neighboring farms were allowed from 2 to 3 acres of pasture per head and had nothing but brown pastures to roam over.

Goslings at first should be fed a mash of two parts shorts and one part corn. At the end of three weeks this menu may be changed to equal parts shorts and corn meal, with five per cent of beef scrap and grit. This diet is taken from Farmers' Bulletin 767, United States Department of Agriculture, the subject of which is "Goose Raising."

CHAUTAUQUAS UNDER CO-OPERATIVE PLAN

Several Minnesota towns are considering a coöperative method of managing their chautauquas in connection with the general extension division of the University of Minnesota. The plan is to group several towns desiring chautauquas. Each community will have entire control of local finances, and will have an equal voice in the management of the affairs of the central association. The association will do the detail work of routing the talent, taking care of tents, etc. The representatives of towns interested will meet at the University in Minneapolis about the middle of April to perfect the organization, and to put on a circuit of chautauquas in the summer of 1918. Any Minnesota town interested may affiliate and should have a representative present at the April meeting. The general extension division has information upon the plan, which it will be very glad to furnish to any one interested.

WARNS FARMERS OF UNKNOWN SEED MEN

Agents purporting to sell Wisconsin pedigreed oats and possibly other seeds have been working in southern Minnesota, according to reports received through the Minnesota Crop Improvement Association by C. P. Bull at the Minnesota experiment station.

From reliable sources, says Mr. Bull, information has been received that it is unlikely that any of the growers of pedigreed seeds in Wisconsin have been sending agents to other states to make sales. The home demand is sufficient to take most of the seed.

On the other hand, the Minnesota station has valuable pedigreed varieties of oats and other farm seeds and through the Minnesota Crop Improvement association growers are now listing these for sale. Varietal tests have shown the Minnesota varieties equal or even superior to introduced varieties. Farmers are, therefore, cautioned against buying from unknown agents.

MIRACLE WHEAT'S WORTH QUESTIONED

Seed wheat advertised as Miracle, Alaska, or Wonder wheat and claimed to produce large yields of grain should not be purchased by Minnesota farmers. Claims that this wheat is superior in yields to the wheats commonly grown in the state, such as Marquis, or Bluestem, can not be substantiated. Furthermore, the milling quality of this wheat is very poor.—A. C. Arny, University Farm, St. Paul.

$5,000,000 A YEAR IN SHORE FORESTS

It is estimated that the lake shore forests of Minnesota, simply by their presence, will be worth to the state more than five million dollars a year if they are kept intact. This is because these forests will add enormously to Minnesota's rank as a summer resort.

The state's summer resort possibilities are an undeveloped source of revenue that promises big things for the future, says E. G. Cheyney of the Minnesota College of Forestry. Maine and the Adirondacks each reap from ten to twenty million dollars annually from their summer resort business and there is no good reason why Minnesota should not receive quite as much.

The attractiveness of Minnesota as a summer playground lies in its lakes, its climate, and its forests. The cool nights offer a welcome relief, hard to imagine for those who have never been without them. The lakes with their opportunities for swimming, canoeing, boating, and fishing offer innumerable attractions to every class of visitor. But neither climate nor lakes nor the two together are complete without the forests. Even the most enthusiastic water lover can not stay on the water all the time. It is the forest that makes the land livable and lends beauty and picturesqueness to the whole country. Destroy the forest and the attractiveness of the country will be destroyed for a majority of the visitors.

"U" EXTENSION WORK

Described in New Bulletin Issued by the General Extension Division

How the University of Minnesota extends its campus to the boundaries of the state, offering scores of courses, practical as well as cultural, through the general extension division, is told in an illustrated booklet issued by the division, under the title "University Extension, What and Why."

The bulletin is published for free distribution and may be secured by addressing a request to the general extension division, University of Minnesota, Minneapolis.