

# THE NORTHWEST MONTHLY



Published Monthly by the Northwest School of Agriculture of the University of Minnesota, Crookston. Entered as second class matter December 2, 1916, at the Post Office at Crookston, Minnesota, under the Act of August 24, 1912.

VOL. VIII.

CROOKSTON, MINNESOTA, MARCH-APRIL, 1924.

NUMBER 4-5.

## SIXTEENTH ANNUAL GRADUATION CLOSES SUCCESSFUL YEAR

With the granting of diplomas to fifty seniors at Commencement the Northwest School of Agriculture has held its sixteenth graduation and has completed the eighteenth year of its existence. A number of departures from previous commencements were made this year. The exercises began March 20 with the first of three music recitals. Twenty of the 74 students taking private music lessons, appeared on the program, which included ten vocal and ten piano numbers. The entire program was a revelation of the excellent progress that was evident all year in music.

### Joint Recital

For the first time two students were able to give a joint recital. Stella Carlson, Hallock, pianist, and Gladys Gunufson, Fertile, lyric soprano, presented the entire program on March 21. Each one gave three groups of songs and was called back for many encores. The feature of Miss Carlson's playing was that it was entirely given from memory. The selections in one group were by Schumann, while the third group "To Spring" by Greig, and the "Juba Dance" by Dett. Miss Gunufson's selections made evident her harmony, clearness of tone and interpretation. Some of her selections were "The Cradle Song" by Kreisler; "The Swallows," by Cowen, and a group of songs in Norwegian, by Greig.

### Concert Recital

The final recital on March 26 included the glee clubs and the advanced piano and vocal students. The boys' glee club in "The Viking Song" and their informal appearance in college songs was especially complimentary to the organization. The Girls' Glee club were equally well pleasing in "Little Orphant Annie" and "The Almond Blossoms." The piano numbers were given by Alice Amundson, East Grand Forks; Anna Flekke, Thief River Falls; Alicia Hoppe, Margaret Selvig, Crookston, and Stella Carlson, Hallock. The vocal numbers were by Helen Gibbons, Iver Johnson, Crookston; Robert Davids, Bagley, and Gladys Gunufson, Fertile.

### Freshmen Win Field Meet

The annual field meet was held March 22. Due to the pleasant weather a number of the races, such as the dashes, jumps, relays and tug of war were held out doors. The remainder of the meet took place in the gymnasium. At the conclusion of

the field meet a gymnasium exhibition took place in which both the boys and the girls took part. The final score of the meet was freshmen 83, seniors 71 and juniors 48.

## NORTHWEST STATION GIVEN ADDED LAND

**Great Northern Railway is Donor**  
Those who remember when the Northwest Station was organized will recall that Mr. James J. Hill, president of the Great Northern Railroad, donated the land for experimental work. The farm included three quarter sections of Section 19, which adjoins the city of Crookston, on the North. The Southwest quarter was not deeded to the University at that time. Later, approximately 68 acres of that quarter were leased to the Northwestern Agricultural Fair association.

Under date of February 1, James T. Maher, land commissioner of the Great Northern Railroad Company, advised Hon. Fred B. Snyder, president of the University Board of Regents, that the remainder of the southwest quarter, excluding the fair grounds, amounting to 88.89 acres, has been donated to the Northwest Experiment Station and that a deed was authorized to be issued to the University. The value of the gift is \$20,000.

This land has been used for experimental work in connection with the other three quarter sections. The issuance of a deed gives the University of Minnesota title to the property.

The Northwest Experiment Station joins the Board of Regents in expressing appreciation to the Great Northern Railroad Company for this deed. At the next meeting of the Board of Regents acceptance of the land will be officially recorded in the minutes of the board.

## JUNIORS ENJOY SHORT COURSE

One hundred twelve boys and girls were in attendance for the twelfth annual junior short course, March 31-April 4. Every county in the Northwest was represented in the course, consisting of class work and recreation. The regular instructors of the school were in charge of the class work and the juniors lived at the institution during the week.

The work for the boys included potatoes, corn, poultry, the baby beef, the dairy calf, the pig, sheep, gardening, rope, and belt work. The girls were cooking, canning, sewing and taking part in some of the other classes, such as poultry and gardening. Prizes were awarded Friday eve-

ning to those who had done the best work in each of the classes. Special emphasis was paid to boys' and girls' club work.

The afternoons were used for demonstrations, excursions, contests and games. Due to the favorable weather ball teams were organized and some close contests resulted.

During the evenings there was community singing, lectures and movies. It was a full schedule each day and everyone was kept busy either at work or play. The group was an especially conscientious one and all were enthusiastic in all they did.

## LARGE PROJECT ENROLLMENT

In spite of the fact that an unusually large number of students are planning to be away from home this summer the home project enrollment is very large. Two hundred fifty-eight projects have been selected by the students upon which data will be gathered during the coming season and records kept. This work carries school credit and is under the supervision of the school faculty. Visits will be made by instructors to all students and other assistance given as far as possible.

For the boys, the largest enrollment is in the corn project. The soybean, the pure seed, and the alfalfa projects also were favorites, indicating the increased interest that is being taken in diversified farming. Some of the other projects are farm accounts, potatoes, soil fertility, tonpig litter, poultry, dairy herd management, planting a windbreak, and tractor operation. Another project in which several have enrolled is the community service project. One student will organize a farmers club this spring. Another will work with some boy scouts, another will try to organize a young people's society, while still another is planning to organize a boys' and girls club in the community. These are the best projects that can be taken and will be the most worth while.

The girls will can meat, fruit and vegetables, make over dresses, crochet, hemstitch, do embroidery work, cook and make bread. Canning seems to be the favorite project, although the sewing work has its enthusiasts, also.

The work will be judged on the general results, the story written at the completion of the work and wherever possible the exhibiting of the work at local fairs and at the home project show at the school next fall.



Issued Monthly by  
**THE UNIVERSITY OF MINNESOTA**  
**NORTHWEST SCHOOL OF**  
**AGRICULTURE**

C. G. SELVIG, Superintendent

OFFICE  
 Northwest Experiment Station,  
 Crookston, Minnesota

A monthly publication in the interest of  
 agricultural education and home training for  
 Northwestern Minnesota.

The senior class play, "A Strenuous Life," was presented in the auditorium, March 10. The play was coached by Miss Simley and was a decided success in every way. The story of the play centered about Tom Harrington, college football captain, who is brilliant in everything in school excepting his studies. In trying to make an impression with his father, who comes on a visit, Tom becomes entangled in all sorts of embarrassing situations. The part of Tom Harrington was taken by Adolph Reski, Oslo; his father by Oliver Howard, Highland; Tom's chum by John Mansfield, Swift, and the freshman by Wesley Sheldrew. Lydia Miller, Roseau, took the part of the landlady; Cora Walters, Beltrami, was Tom's friend; Tom's sister was Inger Lundin, Erskine, and Chester Johnson, Fergus Falls, was the rich mine owner. The minor parts were the college widow by Laura Paulson, Stephen; the real professor by Howard Balk, Guthrie; the athletic director, by Walter Turgeon, Brooks; the bill collector, by Wallace Miller, Roseau, while Harry Henderson, Halstad, took the part of the Japanese servant.

#### Commencement Sermon.

Rev. Duncan P. Cameron, pastor of the Congregational church of Detroit, delivered the commencement sermon in the Methodist church of Crookston. Using as his subject "The Realization of the 'Ideal,'" Rev. Cameron urged the graduates to develop their hidden powers and possibilities. "What you are capable of doing is your greatest asset," said the speaker, and, in conclusion, presented the advantages that come from association with the Divine Being. "Then," he said, "will life resemble a large funnel, ever spreading out into a larger field of usefulness and leadership."

#### Declamatory Contest.

Robert Davids, Bagley and Helen Gibbons, Crookston, won first place in the declamatory contest among the boys and the girl societies. Second place went to Wallace Miller and Lydia Miller, Roseau. Two representatives competed from each of the five organizations. The contest was the closest ever held. In several instances it was necessary to resort to the percentage grades to determine the placings.

#### Reception to Seniors

All graduates from the school will always remember the reception given annually by Superintendent and Mrs. Selvig as one of the most pleasant occasions of the school course. The reception given the seniors this year on March 25 was no exception. The evening was spent in various contests, games, and novelty entertainments of an especially original nature.

#### Commencement Day

The final exercises of the school year were held on March 27. Classes were conducted until 11 o'clock in order that visitors might observe the nature of the work carried on. The class work in all cases presented some practical phase of the course. A number of contests were held during the afternoon in the blacksmithing shop.

A pleasing program had been arranged for the final get-together luncheon. Instead of having toasts the program was given over to music, community singing and the announcement of awards.

Elmer Johnson, Drayton, N. Dak., was awarded a blacksmith's hammer for winning the blacksmithing contest. Recognition in debating was made to Albert Kopecky, Angus; Helen Gibbons and Iver Johnson, Crookston; Emma Nelson, Gatzke; Elmer Miller, Erie; Elmer Anderson, Clearbrook; Theodore Neske, Princeton, and Arnie Solem, Thief River Falls.

The seniors were awarded the stock judging trophy in the interclass contest, the juniors second and the freshmen third. The winning team was Ebenhard Gandrud, Detroit; Oliver Howard, Highland, and Robert Davids, Bagley. Basketball awards were made to Cecil Bergh, Halstad; Joseph Skatsvold, Twin Valley; James Hanson, Cass Lake; Bert Johnson, Kratika; Allen Gandrud, Detroit; Howard Balk, Guthrie; Melvin Eidsmoe, Nielsville; Iver Johnson, Crookston; Oliver Howard, Highland, and Ernest Thompson, Fosston.

Honorable mention was made to Walter Turgeon, Brooks; John Covlin, Erskine, and Einar Loven, Gatzke.

Athletic "A's" were awarded to the following members of the girls' team: Gladys Gunufson, Mildred Oswald Fertile; Helen Gibbons, Crookston; Jalma Udstrand, Holt; Theresa Aakre, Goodridge; Alice Engelstad, Nielsville, and Agnes Forsness, Greenbush.

#### Senior Class Exercises.

Following the luncheon the senior class exercises were held at 3 o'clock. James Hanson, Cass Lake, acted as chairman and after greetings had been extended by Miss Simley, class adviser, the prophecy was given by Theresa Aakre, Goodridge; history by Alfred Voxland, McIntosh, and the will by Robert Davids, Bagley. The "key" was presented by Marie Hamrick, Angus, to the president of the junior class, Stella Carlson, Hallock. The address to the class was given by the adviser, A. K. Pierce. Using as his subject, "Intolerance," Mr. Pierce showed that there is a great deal of intolerance in creeds, religions, nationalities, and politics. One object of an education, he said, was

to create a more charitable spirit towards those who hold different opinions.

#### Commencement.

The final exercises of the week took place at 8 o'clock, March 27. The class oration was given by Arnie Solem, Thief River Falls, with the class motto as his subject, "To Make the Best Better." The best, he said, was to be considered as "Idealism." Mr. Solem urged his classmates to have an ideal of the best in life and endeavor in every manner to realize it through service.

The commencement address was given by Dr. C. A. Prosser, of Minneapolis, who had as his subject "The Call of Service." Mr. Prosser said there were two kinds of services, one through the job and the other through the job plus. The latter, he said, was the more important, as it was done with the interest of the other fellow at heart. This is the service done, he said, which is not thought of as a part of the job and for which financial remuneration is not ordinarily given. It does not depend on unusual talent, means or ability, but upon doing what can be done according to the ability and capacity one possesses. The greatest call for service, concluded Dr. Prosser, comes from the rural communities, where the challenge comes to apply trained intelligence in leadership.

In presenting the diplomas, Mr. Selvig urged each one to make his life worth while and said that the confidence expressed by the faculty in granting the diplomas should serve as a spur to a life of service. Mr. Selvig also announced seven scholarships from the Caleb Dorr fund, in public speaking, general progress, and according to certain points of conduct.

The public speaking scholarships were awarded each class as follows; seniors, Helen Gibbons, Crookston; second, Wallace Miller, Roseau; juniors: Elmer Anderson, Clearbrook, first; second to Ellen Lervold, Halstad; freshmen: Alicia Hoppe, Crookston, first, and second to Arthur Ramse, McIntosh. In the best progress in each class awards were made seniors, Robert Davids, Bagley, first; Emma Nelson, Gatzke, second; juniors, Elmer Miller, Erie, first, and Esther Strickler, Euclid, second; freshmen, Phinney Stenborg, Clearbrook, first, and Ben Hurner, Glyn-don, second.

The scholarship based upon highest points for scholarship, participation in activities and general conduct, first place was awarded Oliver Howard, Highland, and second to James Hanson, Cass Lake. Each scholarship was for \$45 and will be applied on school expenses next year.

The graduates who received diplomas from the three year course were Theresa Aakre, Goodridge; Sylvester Adamski, Oslo; Howard Balk, Guthrie; Robert Davids, Bagley; Melvin Eidsmoe, Nielsville; Mabel Ellingson, Waukon, Iowa; Alice Engelstad, Nielsville; Allen and Ebenhard Gandrud, Detroit; Helen Gibbons, Crookston; Gladys Gunufson, Mildred Oswald, Martin Harstad,

It is an early wheat and sometimes escapes the rust, but it is not rust-resistant. As a three-year average, it has yielded the least of any variety tried.

The protein or gluten content of wheat is due to soil and climatic conditions. It is not hereditary. Importing seed of high gluten content will not result in a crop containing more gluten except that purer seed may be obtained. One important reason for the low gluten of some of our wheat is that it is so badly mixed with inferior varieties. Obtaining pure seed from the Valley will be as satisfactory as purchasing from Montana or Canada.

#### Barley

In 1922 barley produced 2433 pounds of grain per acre, as compared to 1884 pounds of oats. Furthermore a pound of barley is of superior feeding value to a pound of oats. It has the lowest water requirement of the common small grains. Minn. No. 184, a six row type, has been the best yielder. A new variety in which there are no teeth on the beards will be ready for distribution in a year or two. Barley should be planted comparatively early.

#### Oats

Minota, Minn. No. 281, and Victory have been high yielding medium-maturing varieties, while Gopher and Iowa 103 have been high yielding early oats. Several new varieties that are rust-resistant and stiff strawed may be seen at the station this summer.

#### Flax

Poor results with flax are ordinarily caused by wilt (a disease that lives over in the soil), weeds, a loose seed bed, and late planting. There are four varieties that are wilt-resistant, although not wilt-proof: Chipewewa, North Dakota 114, North Dakota 52, and Winona. For control of pigeon grass, a mixture of wheat and flax has proved successful. Seeding at the rate of 30 pounds of wheat and 28 pounds of flax has done well, although only 15 pounds of wheat has also controlled weeds. The seed bed should be well settled and clean from noxious weeds.

#### Winter Rye

Swedish No. 2 has proved most winter hardy. Best results have been obtained by seeding from September 1-10.

#### Corn

Secure home-grown seed of an adapted variety that is pure. Test it for germination. Plant from May 10-15 if weather permits. Plant in rows to be cultivated both ways. Do not cultivate deep, but keep clean by early cultivations. Send for bulletin on corn.

#### Sweet Clover

Use the white blossom variety and plant scarified seed in the spring with a nurse crop. From 2-3 head of stock may be pastured per acre. Pasture second year growth until August and then turn on new seeding. Corn or potatoes are better crops to follow sweet clover than small grains. When plowing under a crop, disc thoroughly so that soil will not dry out. Do not plant alfalfa after sweet clover.

#### Alfalfa

Alfalfa makes the best hay crop. No variety has as yet been proved superior to Grimm. Inoculate alfalfa seed before planting. Plant on a firm seed bed free from weeds and well drained.

#### Soybeans

For seed-production Minsoy and Wisconsin Blacks may be counted upon to ripen. Chestnut or Manchu are recommended for silage with corn. For hogging-off Minsoy with early flints are best, but Wisconsin Blacks are satisfactory. Planting the soybeans alone and mixing with corn in the silage cutter has proved more satisfactory than planting together.

#### JUNIOR-SENIOR BANQUET UNIQUE

The Junior-Senior banquet, held March 3 was one of the most successful ever held at the school. The juniors had arranged the dining hall to represent a tourist camping site and everything was complete from band stand to the fountains and flower plots. The courses on the menu were named after terms connected with touring, as was the program that followed. Theodore Neske, Princeton, acted as toastmaster. Those who responded to toasts were: "Preparation," Elmer Krogstad, Fertile; "Blow Out," Wallace Miller, Roseau; "Filling Station," Margaret Woods, Spooner; "Stop, Look, and Listen," Albert Kopecky, Angus; "Repairs and Accessories," Mr. Pierce, and "Signs Along the Way," by Supt. C. G. Selvig.

The music for the evening was furnished by the junior girls quartette, piano numbers by Miss Dokken and Anna Flekke and vocal solos by Miss Bothne.

#### FROM NEAR AND FAR

Announcement has been received of the marriage of Clyde T. Green, '21, to Mabel Peterson, Hot Springs, South Dakota, on January 15. The N. W. Monthly sends congratulations and best wishes.

Walter Welte, '22, is doing cow testing association work in Olmstead county and can be reached at Rochester through the Farm Bureau.

John Nakken, '23, writes from box 622, North Hibbing, that he is working in the shops of the Oliver Iron Mining Company, doing repair work. He also states that Gust Tammy, '22, is electrician in the same shops.

Laura Jensen, '20, is instructor in dramatics. Her address is 4818 Michigan Avenue, Chicago, Illinois.

Lena Edman, '19, will complete her teachers training course at Lewiston, Idaho, this summer.

Mr. and Mrs. Lloyd Ness (nee Neva Gibbons, '22), announce the arrival of a son, March 1. His parents already predict that he will sometime represent the N. W. School in football.

Odin Lutness, who attended the N. W. S. A. in 1914, is now located at Westby, Montana. Odin visited at the school on March 17, and stated that he now owns a section of land and is farming in northeastern Montana.

Chloe Starr, '16, writes that she is teaching Indian children in the primary grades at Onigum, Minnesota. She has only one white pupil.

Lloyd Ness, '22, underwent an operation for appendicitis early in March. It is reported that he is getting along nicely.

Among the alumni who attended the commencement exercises are: Mrs. A. F. Berge, (nee Naime Nansen, '22), LaVern Peterson, '22, Brooks; Richard Aakre, '22, Goodridge; Noble Olson, '21 and George Olson, '22, Middle River; Myrtle Erickson, '21, Goodridge, and Harry Hedlin, '11, Crookston.

Mrs. Carl Berg (nee Cora Paulsberg), Warroad, visited friends at the school early in March.

W. V. Gousseff, who left the animal husbandry department at the school in 1919, to become the secretary of the Illinois Duroc Jersey association, has since the first of the year been connected with the Duroc Publishing and the Swine World Publishing Company, at Des Moines, Ia. His address is Third and Chestnut Street.

D. H. LaVoi has gone to Lamberton, Minnesota, where he will teach in the Smith-Hughes department of the high school.

Miss DeEtte Cenfield, assistant in the English department, expects to leave for the Philippines early in April, where she will teach, beginning in June.

Miss Blanche Mead expects to enroll in the Agricultural College, where she will complete her course for a B. A. degree.

A. K. Pierce will be enrolled in the college of education of the University of Minnesota during the next three months.

Miss Mildred Schenck of the Northwest School will judge the Bread and Garment demonstration contests in the northwestern district again this year. District club leader A. J. Kittleson reports there will be more demonstration teams in the Home Economics projects this year than in any previous year.

A. H. Larson expects to assist at the district play days in Roseau county the first week in May.

A beautiful taupe velour stage curtain, a gift of the classes of 1923 and 1924, was installed in time for commencement exercises.

The 1924 Red River Aggie, a beautiful 58 page book, with several pages of illustrations, was received and distributed the week before commencement.

The Middle River and Twin Valley high school teams met at the Northwest School on March 28, for the championship debate of the ninth congressional district. Middle River won the contest and will represent this district in the inter-district contest.

Miss Anna Thiel, school nurse, will be connected with the University Health Service, Minneapolis, this summer.

Among those from the school who attended the annual banquet of the Fairfax-Andover club, at the home of C. O. Quist, on March 20, are Supt. and Mrs. C. G. Selvig, Mr. and Mrs. McCall, Miss Agnes Bothne and Miss Lucille Dokken.

Mr. T. M. McCall and Miss Anne Simley attended the Mallory farm club meetings on March 19.

# Program for Red River Valley Week--Northwest School Farmers' Week, Women's Meetings and Red River Valley Winter Shows

FEBRUARY 4, 5, 6, 7, AND 8, 1924

## PROGRAM OF EVENING MEETINGS

### ARMORY

MONDAY EVENING, FEBRUARY 4

Address of Welcome—Supt. C. G. Selvig.  
Address—Dr. J. A. O. Stub, Minneapolis.

TUESDAY EVENING, FEBRUARY 5

Address—Dr. Preston J. Bradley, Chicago.

WEDNESDAY EVENING, FEBRUARY 6

Greeting from Dean W. C. Coffey, St. Paul.

Address—President D. J. Cowling, Northfield.

THURSDAY EVENING, FEBRUARY 7

Red River Valley Song Festival.

Address—President L. D. Coffman, Minneapolis.

FRIDAY EVENING, FEBRUARY 8

Address—Dr. C. A. Prosser, Minneapolis.

BRING THIS PROGRAM WITH YOU.

## SCHEDULE OF MEETINGS, EXHIBITS, CONTESTS AND SALES

The following events will take place in Crookston during Northwest School Farmers' Week meetings and the Red River Valley Winter Shows, February 4 to 8, 1924.

### FARMERS' WEEK MEETINGS

Crops for Livestock Feeds.....	Tuesday, February 5
Livestock Problems.....	Wednesday, February 6
Balancing Farm Production.....	Thursday, February 7
Stabilizing Farm Prices.....	Friday, February 8

### EDUCATIONAL CONTESTS

9:00 A. M., February 4

Livestock judging contests for farm club, high school and inter-class teams of Northwest School of Agriculture. T. M. McCall and D. H. LaVoi in charge.

9:00 A. M., February 4

Farm Crops judging contests for high schools, E. R. Clark in charge.

Red River Valley Spelling contest will be held on Friday, February 8, at the Central High School building. The two winners in the county contest will be eligible to compete in this event from Becker, Clay, Clearwater, Kittson, Mahanomen, Marshall, Norman, Pennington, Polk, Red Lake, and Roseau.

Committee in charge: E. K. Sampson, Ada; Erba Pouliot, Red Lake Falls, and Ingeborg Espeseth, Crookston.

The final spell-down will be held at 4:00 o'clock, Feb. 8, at the Armory.

### SHOWS AND EXHIBITS

Livestock, junior livestock, poultry and farm crops shows, an industrial and implement exhibit and various educational exhibits will be held during the entire week in the Red River Valley Livestock association's pavilion and two annexes.

### ASSOCIATION MEETINGS

Red River Valley Livestock.....	11:00 A. M., Tuesday, February 5
Red River Valley Crops and Soils.....	10:00 A. M., Tuesday, February 5
Boys' and Girls' Club Conference.....	11:00 A. M., Tuesday, February 5
Northern Minnesota Poultry.....	12:00 o'clock, Wednesday, February 5
Minnesota Red River Valley Development.....	6 P. M., Thursday, Feb. 7
Red River Valley Guernsey Breeders.....	12:00 M., Thursday, February 7
Northwest School of Agriculture Alumni.....	4:00 P. M., Friday, Feb. 8

### PUREBRED LIVESTOCK SALES

Chester White, Duroc Jersey and Poland China.....	Thursday, February 7
Holsteins.....	Friday, February 8

## FOURTEENTH ANNUAL NORTHWEST SCHOOL FARMERS' WEEK AND WOMEN'S MEETINGS

### INFORMATION

The meetings, both men's and women's, scheduled for the week, excepting the meetings of Valley organizations, are held under the auspices of the University of Minnesota, Northwest School of Agriculture, Crookston, and are a regular part of the work of that institution.

Reduced railroad rates have been granted. Fare and one-half, open rate. No certificates are required. Tickets are on sale February 2 to 8, inclusive, with final return limit, February 11.

On arriving at the Red River Valley Winter Shows building, secure tickets for the day or the week. There is no charge for the day sessions held in the Armory or

the women's meetings held in the Presbyterian church.

The daily admission to the livestock, farm crops and poultry exhibits is 50 cents. Admission to each evening program is 50 cents. Day and evening combined on special ticket of admission, 75 cents. One ticket for entire week, is \$2.00.

For lodging accommodations inquire at the Lodging Booth at the Winter Shows building.

Be sure to read carefully the announcements in these pages for the different association meetings, shows and conferences.

Attend evening programs in the Armory, Monday, Tuesday, Wednesday, Thursday and Friday. They begin promptly at 7:30 o'clock. The Red River Valley Song Festival will be held on Thursday evening.

Note the meetings by various organizations. These are very interesting events. Opportunity is presented to get acquainted with members from other counties.

Tuesday, February 5, will be growing livestock feeds day, when special topics relating to these crops will be given.

Wednesday, February 6, will be livestock day. Northern Minnesota Poultry Association will hold its annual meeting on February 6, also.

On Thursday, February 7, balancing farm production will be the principal theme.

On Friday, February 8, the topic will be on the subject of re-establishing the purchasing power of the farmers' dollar. This meeting is held under the auspices of the Minnesota Red River Valley Development Association, C. H. Zealand, Secretary.

The Red River Valley Guernsey Breeders' Association will meet at 12:00 noon, Thursday, February 7, at the Armory, in room at right of entrance. Leonard Houske, secretary.

Boys' and girls' club conference in room at right of entrance, Armory, Tuesday, February 5, 11:00 A. M.

The Northwest School of Agriculture Alumni association meeting will be held at the Northwest School Auditorium at 4:00 P. M., Friday, February 8. There will be a dinner served at 6:00 o'clock. All members of the Alumni association are requested to attend. Make reservations for the dinner. Alumni ball in evening. Harry Hedin, Crookston, is in charge.

## PROGRAM

### MONDAY, FEBRUARY 4

9:00 LIVESTOCK PAVILION JUDGING ARENA  
Farmers' Club, Township Team, High School and Northwest School of Agriculture Livestock Judging Contests.

Judges: Sheep, W. A. Peters; Horses, H. G. Zavoral; Dairy Cattle, A. M. Challey; Beef Cattle, Wm. Guy; Swine, D. B. Morris.

9:00 LIVESTOCK PAVILION, 2ND FLOOR

High School Farm Crops Judging Contest.

Judges: T. A. Erickson, A. J. Kittleson and R. C. Rose.

9:00 LIVESTOCK PAVILION, 2ND FLOOR

Judging Grain, Corn, and Potato Exhibits

Judges: A. C. Arny and R. C. Rose, University Farm, St. Paul, and M. J. Thompson, Duluth.

Judging Livestock Exhibits

Judges: Dairy cattle: H. R. Searles, U. Farm, St. Paul; Beef cattle, W. E. Morris, U. Farm, St. Paul; Swine, A. A. Dowell, U. Farm, St. Paul; Sheep, W. C. Coffey, U. Farm, St. Paul; Junior Classes, H. R. Searles and W. C. Coffey.

Judging Poultry Exhibits

Judge: Geo. W. Hackett, Minneapolis.

5:30 CROOKSTON ASSOCIATION

Dinner meeting of members of judging teams and junior livestock exhibitors.

Crookston Municipal Band, H. L. Smith, Director, will furnish music during the afternoon.

## MONDAY EVENING

7:30 AUDITORIUM ARMORY

L. D. Foskett, President of Kiwanis Club, Presiding

Music—Crookston High School Orchestra, R. S. Coker, Director.

Address of Welcome—C. G. Selvig, Superintendent, Northwest School and Station, Crookston.



Community Singing—Fred W. Carberry, Director.  
 Music—Junior High School Boys' Glee Club.  
 (a) All Through the Night..... Old Welsh Air  
 (b) Vive L'Amour ..... College Song  
 F. I. Schweppe, director, Claire Fylling, accompanist.  
 Address—"Trimming the Wick", Dr. J. A. O. Stub, Minneapolis.  
 See Poultry Shows: Be sure to see the entries in this year's  
 Northern Minnesota Poultry Association Poultry Show, second floor,  
 Annex B.

## TUESDAY, FEBRUARY 5

9:00 LIVESTOCK PAVILION  
 Livestock Judging Classes.  
 Judging Poultry Show, Second Floor, Annex B.

10:00 ARMORY  
 Alfalfa Seed in the Red River Valley  
 Getting a Start with Hardy Varieties..... A. C. Army  
 The Performance of Minnesota Grimm..... R. F. Crim  
 The Seedman's Interest in Certified Seed..... C. A. Bush

10:30 LIVESTOCK PAVILION  
 "Proper Feeding of a Dairy Cow"—The Bemidji Dairy Demon-  
 stration team, Theodore Fenske and Marshall Nugent. They won first  
 on their demonstration at the State Fair, and received a free trip to  
 the National Dairy Show at Syracuse, N. Y., where they won first  
 place over teams from 19 other states. The leader for the Beltrami  
 county team is H. A. Pflughoeft, teacher of agriculture, Bemidji.

11:00 LIVESTOCK PAVILION  
 Annual Business Meeting of the Red River Valley Livestock Associa-  
 tion, followed by Luncheon Meeting at Rap's Cafe.

11:30 ARMORY  
 Annual Meeting of Red River Valley Crops and Soils Association.

1:30 ARMORY  
 General Subject: "Growing Feed for Livestock in Red River Valley."  
 Sweet Clover and Soybeans—A. C. Army, University Farm, St. Paul,  
 and O. M. Kiser, Northwest School, Crookston.

Northern Corn for Northern Climate—H. L. Walster, North Dakota  
 Agricultural College, Fargo.

The Red River Valley Alfalfa Campaign—C. R. Hutcheson, N. W.  
 Farmstead, Minneapolis.

The Red River Valley as a Livestock Region—Dean W. C. Coffey,  
 University Farm, St. Paul.

## TUESDAY EVENING

7:30 ARMORY  
 G. H. Sanberg, President of Rotary Club, Presiding  
 Community Singing, Fred W. Carberry, Director.

Music—Combined Mixed Chorus from Crookston High School and  
 Northwest School of Agriculture.

(a) Hail to the Heroes (From "Aida") ..... Verdi  
 (b) Love's Old Sweet Song ..... Molloy  
 Presented under direction of Mr. F. I. Schweppe  
 and Miss Agnes Bothne

Address—"The Window of the World," Dr. Preston J. Bradley,  
 Chicago.

See the Farm Crops Exhibit: Be sure to inspect the grain, corn  
 and potato exhibits, first and second floors of Livestock pavilion.

## WEDNESDAY, FEBRUARY 6

9:00 LIVESTOCK PAVILION  
 Parade of Prize-Winning Livestock.  
 Presentation of Silver Trophies:

Best Beef Herd in the Red River Valley, won in 1923 by University of  
 Minnesota, Northwest School and Station, Crookston.

Best Dairy Herd in the Red River Valley, won in 1923 by C. L.  
 Spaulding, Warren.

Best Sheep Flock in Red River Valley, won in 1923 by University of  
 Minnesota, Northwest School and Station, Crookston.

Best Swine Herd in Red River Valley, won in 1923 by R. E. More-  
 head, Euclid.

Best Dairy Calf in Junior Livestock Show, won in 1923 by Allen  
 Gandrud, Detroit.

10:00 ARMORY  
 General Subject: "Raising Livestock in the Red River Valley."  
 Feeding the Dairy Cow and Calf—H. R. Scaries, University Farm,  
 St. Paul.

Making Money in Hog Raising—A. A. Dowell, University Farm, St.  
 Paul.  
 Discussion.

12:00  
 Luncheon Meeting, Northern Minnesota Poultry Association. Place  
 of Meeting to be Announced.

1:30 ARMORY  
 Producing Beef in the Red River Valley—W. H. Peters, University  
 Farm, St. Paul.

Deficiencies in Feeding Rations, How to Overcome—C. H. Eckles,  
 University Farm, St. Paul.

Minnesota's Record in Dairying—Chr. Heen, state dairy and food  
 commissioner, St. Paul.

What Should the Red River Valley Produce in 1924?—Andrew Boss,  
 University Farm, St. Paul.  
 Discussion.

## WEDNESDAY EVENING

7:30 ARMORY  
 J. Harry Sylvestre, Representing Crookston Association, Presiding  
 Community Singing—Fred W. Carberry, Director.

Music—Girls' Glee Club, Northwest School.  
 (a) Hearts Light as Air ..... Weckerlin  
 (b) Almond Blossoms ..... Pestalozza  
 Miss Bothne, Director; Miss Dokken, Accompanist

A Word of Greeting—W. C. Coffey, Dean, University Department of  
 Agriculture.

Address—President D. J. Cowling, Carleton College, Northfield.  
 See the Livestock Exhibits: Be sure to see the livestock exhibited in  
 this year's Red River Valley Livestock Association show.

## THURSDAY, FEBRUARY 7

9:00 LIVESTOCK PAVILION  
 Presentation of Sweepstakes Prizes in farm crops show and for  
 best farm crops exhibits by farm clubs.

Parade of Prize Winners in Red River Valley Livestock association  
 livestock show.  
 Livestock Judging Demonstration.

10:00 ARMORY  
 General Subject: "Balancing Farm Production in the Red River  
 Valley."

Profits in Raising Sheep on Red River Valley Farms, W. H. Peters,  
 University Farm, St. Paul.

Mineral and Protein Supplements in Hog Feeding—W. E. Morris,  
 University Farm, St. Paul.

1:30 ARMORY  
 Poultry Production Problems—N. E. Chapman, University Farm, St.  
 Paul.

Potato and Sugar Beet Production in the Red River Valley—T. M.  
 McCall, Northwest School, Crookston.

The Importance of Balancing Production—Andrew Boss, University  
 Farm, St. Paul.

Diversified Farming in the Northwest—President J. L. Coulter, North  
 Dakota Agricultural College, Fargo.

## THURSDAY EVENING

7:45 ARMORY  
 N. A. Thorson, Representing Singers' Association, Presiding  
 Part One—Red River Valley Combined Chorus.

Address—President L. D. Coffman, University of Minnesota, Minne-  
 apolis.

Part Two—Red River Valley Combined Chorus.

## FRIDAY, FEBRUARY 8

9:00 ANNEX B, SECOND FLOOR  
 Presentation of Awards to Winners in the Poultry Show.  
 Poultry Demonstration.

9:00 LIVESTOCK PAVILION  
 Parade of Prize Winners in Livestock Show.  
 Livestock Judging Demonstration.

10:00 ARMORY  
 Meeting held under the auspices of the Minnesota Cooperative Potato  
 Growers Association.

"The Potato Warehousing Problem."  
 Meeting held under the auspices of the Minnesota Red River Valley  
 Development Association.

"Re-establishing the Purchasing Power of the Farmers' Dollar."  
 4:00 ARMORY  
 Red River Valley Rural School Spelling Contest.

## FRIDAY EVENING

7:30 ARMORY  
 C. G. Selvig, President Winter Shows, Presiding  
 Music—High School Girls' Glee Club:

(a) Swing Low, Sweet Chariot ..... Burleigh  
 (b) Shooey Shoo ..... Ambrose  
 F. I. Schweppe, Director; Minnie Hoven, Accompanist.

Address—"The Magic Chance"—Dr. C. A. Prosser, Minneapolis.  
 Special Exhibit: Be sure to see the Industrial and Farm Machin-  
 ery Exhibits in Annex B.

## WOMEN'S MEETINGS

At 10:30 each morning, on Tuesday, Wednesday, Thursday and  
 Friday, February 5-8, regular classes will be held at the Presbyterian  
 church.

Miss Carlotta Brown, instructor in millinery, Home Economics  
 department, University Farm, St. Paul, will conduct classes on Feb.  
 5 and 6.

Miss M. Louise Stoddard, instructor in home decoration, from the  
 same institution, will conduct classes on Feb. 7 and 8.

## AFTERNOON MEETINGS

The afternoon meetings on the same days will be held in the audi-  
 torium of the Presbyterian church. These meetings will commence  
 promptly at the time scheduled.

Mrs. James Paige is a prominent lecturer living in Minneapolis,  
 and is a member of our state legislature. She recently returned from  
 a trip to Europe and has a vital and interesting message.

## TUESDAY FORENOON

10:30 When You Choose Your Hat—Miss Carlotta M. Brown.

## TUESDAY AFTERNOON

1:45 General Singing, led by Fred W. Carberry.  
 2:00 Shopping in Your Attic—Miss Carlotta M. Brown.  
 2:50 Pipe Organ Selections—Mrs. Wm. A. Nebelung.

3:00 Address—Dean W. C. Coffey.  
 3:30 Music—Selected.  
 3:45 Address—Dr. Preston J. Bradley.

## WEDNESDAY FORENOON

10:30 Renovation—Miss Carlotta M. Brown.

## WEDNESDAY AFTERNOON

1:45 General Singing, led by Fred W. Carberry.  
 2:00 Brim Coverings—Miss Carlotta M. Brown.  
 2:50 Pipe Organ Selections—Miss Agnes Bothne.

3:00 Address—President D. J. Cowling.  
 3:30 Music—Selected.  
 3:40 "An International Woman's Congress"—Mrs. James Paige,  
 Minneapolis.

## THURSDAY FORENOON

10:30 Wall Paper and Floor Coverings—Miss M. Louise Stoddard.

## THURSDAY AFTERNOON

1:45 Pipe Organ Selections—Mrs. Wm. A. Nebelung.  
 2:00 Home-like Living Room—Miss M. Louise Stoddard.  
 2:50 Music.

3:00 Address—Music in the Past, Present and Future—Dr. Victor  
 Nilsson, Musical Critic of the Minneapolis Journal.  
 3:45 Woman's Place in Politics—Mrs. James Paige, Minneapolis.

## FRIDAY FORENOON

10:30 Uses of Flowers in the Home—Miss M. Louise Stoddard.

## FRIDAY AFTERNOON

1:45 Pipe Organ Selections, Miss Agnes Bothne.  
 2:00 Dresses Becoming in Line and Color, Miss M. Louise Stoddard  
 2:50 Music—Selected.

3:00 Address—President L. D. Coffman.  
 3:30 Music—Selected.  
 3:40 Address—Dr. C. A. Prosser.

## Summary of Results for 1923, Northwest Experiment Station

TAKEN FROM ANNUAL REPORT NOW ON THE PRESS. SEND FOR COPY.

1. Marquis, with 15.8 bushels per acre, has the highest average yield during the last four years of any common wheat variety. It has a 12-year average of 20.7 bushels.

2. Mindum, an amber durum, has outyielded all varieties with an average of 24.6 bushels for 12 years and 19.9 bushels for the last 4 years.

3. Of 10 varieties of common wheat compared, Kota has proved the most resistant to rust, although as a four year average, it has not outyielded Marquis (average of 15.5 bushels). It has a tendency to lodge, and milling qualities are still questionable. In 1923, a rust year, it yielded slightly more than Marquis, but the quality of Kota was markedly superior.

4. One year trial of wheat and flax mixture shows no increase in yield for the mixture over either grown alone, but wheat in flax controlled the weeds.

5. Medium maturing oats have outyielded the early varieties. Minota and Minn. 281 are standard varieties that have proven satisfactory. Gopher is a good early variety.

6. Minn. No. 184 is a high yielding 6-row barley and Svansota a reliable 2-row variety.

7. Minn. No. 2 rye has the highest average yield of the rye varieties.

8. Winter wheat has been successfully grown at the Northwest Station only when sown between the rows of standing corn, with every tenth row left standing.

9. Chippewa flax has proved most resistant to wilt. Seed is available for distribution. Saginaw is recommended for a fiber variety.

10. Minnesota Grimm Alfalfa is recommended as a hay and seed crop for northwestern Minnesota. Seeding alone from June 15 to July 15 has given best results.

11. Sweet clover is recommended as a pasture and soil-improvement crop for Northwestern Minnesota. In a 2-year trial no marked difference in yield of hay was obtained between the white and yellow blossom. Annual (Hubam) yielded almost twice as much hay the first year as the biennial, but over a two-year period, the biennial yielded about one ton more than two annual crops of the Hubam.

12. Soy beans are recommended for seed production, hay, hogging-off, and for silage. Minsoy and Wisconsin Black are safe varieties for this section.

13. Soy beans planted with a grain drill produced larger yields than with a corn planter, but almost three times as much seed per acre was required.

14. Of the soy beans planted with corn for silage, Chestnut soy beans proved best with Northwestern Dent.

15. Corn is a successful crop if early-maturing varieties and home-grown seed are used. Adapted strains produced near home, seed of high germination, early planting, and careful cultivation are the essentials.

16. Northwestern Dent corn with 49.6 bushels of ear corn per acre, has produced the highest average yield of ear corn.

17. North Dakota White Flint, Pearl Flint and Gehu have produced average yields of from 43 to 48 bushels per acre. They are recommended for ear corn and for hogging off.

18. Minnesota No. 13 is recommended for silage corn; N. W. Dent for the northern section of the valley.

19. The early seeding of barley out-yielded the later seeding by nearly six bushels per acre.

20. The September 10 seeding of winter rye has given best results.

21. In a mixture of wheat and oats the mixture outyielded the wheat-alone seeding by 588 pounds per acre. Wheat in the mixture was less affected by rust than when seeded alone.

22. Of the three-five, and seven year rotations carried on at the Northwest Station, it has been demonstrated that all are satisfactory, but that the seven year rotation is the weediest.

23. A ten-year average shows that it would require 100 acres of continuous wheat to produce as much as 60 acres of wheat in a rotation.

24. Rotating wheat, barley and oats has shown no increase over continuous cropping.

25. Although copper carbonate has not been as effective in controlling smut as formaldehyde, it has not in two years reduced the yield, but rather an increased yield has been obtained. Formaldehyde has reduced the yield of wheat and oats as compared to untreated grain, although smut has been controlled.

26. Plowing under sow thistle seed to a depth of seven inches does not kill them but it greatly retards their growth, so that fewer cultivations are necessary to prevent leaves from forming. Infestations occur more generally from old roots than from seed, although, given favorable conditions, seedlings may produce heavy infestation.

27. Commercial fertilizers have not paid for themselves in the grain and corn crops on the station soil, but cooperative trials in other counties show profitable increases from phosphate. Marked increases are also obtained at the station from the use of phosphate on alfalfa and clover.

28. The largest increases from manure are obtained from the 16 to 32 ton per acre applications, but the most economical increases come from the four ton per acre application.

29. Pure seed stocks in limited amounts are distributed to farmers who will plant them on clean land to increase further the available amount of superior producing strains.

### HORTICULTURE

30. Virginia, Transcendent, Arctic, Early Strawberry and Siberian crab apples and Hibernial and Malinda seedling apples are fruiting at the Northwest Station.

31. Many of the less hardy varieties of apples top-grafted on hardy crab stocks are making good growth.

32. Practically all of the standard American plums do well here. The Winnipeg plum and the Zumbra cherry are two very promising varieties for Northern Minnesota.

33. Beta and Campbell's early grapes are fruiting.

34. Red currant varieties that yield best are Perfection, Pomona, Red Cross, Long Bunch Holland and London Market.

35. Gooseberry varieties that yield best are the Carrie, Houghton, and Pearl varieties.

36. Raspberry varieties that yield best are the Latham, King, Sunbeam, and Gregg varieties.

37. Strawberry varieties that yield best are Duluth and Progressive ever-bearing and Senator Dunlap.

38. The white elm is a very valuable tree for this section of the state. Write for recommended list of trees.

39. A large number of ornamental shrubs are adapted to northwestern Minnesota's conditions. Write for list of shrubs.

40. Recommended varieties of the different kinds of garden vegetables and root crops will be mailed upon application.

41. Early varieties of potatoes, such as the Early Ohio, Irish Cobbler and Triumph are best for the Red River Valley. The Green Mountain is best of the late varieties.

42. Very profitable returns have come from treating seed potatoes. The hot formaldehyde or the corrosive sublimate solutions are recommended for tuber disease treatment.

43. From two years tests with inoculated sulphur for potato scab, it has been found that 400 lbs. per acre reduces the alkalinity of the soil but slightly and that scab control on the sulphur plots has not been complete.

44. Home-made Bordeaux mixture proved more economical than the commercial brands in spraying potatoes.

45. Five applications of Bordeaux with a high pressure liquid sprayer increased the yield of potatoes 50.45 bushels per acre over those not sprayed.

46. Acid phosphate continues to be the most profitable commercial fertilizing material for potatoes on the station soil, producing an increased yield in 1923 of 49.6 bushels per acre.

47. Sixteen tons of manure per acre produced the greatest yield of potatoes per ton of manure applied.

48. Many desirable, apparently disease-free strains are showing up

in the tuber unit selections of Early Ohio and Irish Cobbler potatoes.

49. Vilmorin Elite sugar beets have produced an average of 12 tons per acre per year for the past nine years.

50. Mangel varieties in 1923 yielded from 23 to 31 tons per acre. Hundreds of varieties of trees, shrubs, fruit trees, small fruits, flowers and lawn grasses may be seen best in a personal visit. Bring your neighbors and spend a day at the Northwest Station.

#### LIVESTOCK

51. Hogs can be profitably finished on barley when corn is not available or too high in price.

52. Pasture is required if pork is to be produced economically.

53. Pigs will make favorable and economical gains on rye.

54. Skimmilk is more economical and a more satisfactory feed than tankage in producing animal growth.

55. Lambs return a greater profit on feed consumed than other classes of livestock.

56. Lambs on good pasture will make an average daily gain of from .35 to .4 lb.

57. Hogging off corn is the most economical method of producing gains during the fall months, after pigs have made a growth on summer pasture.

58. For economical gains in hogging off corn, a protein must be supplied. Soybeans planted with the corn will supply the protein requirement.

59. Shorts or flour middlings when used with barley and tankage in a ration for growing pigs on alfalfa pasture will make a more economical ration than barley and tankage.

60. Sweet clover is demonstrated to be a very valuable pasture crop for Northwestern Minnesota.

61. Good second cutting sweet clover hay has practically the same feeding value as alfalfa hay.

62. The first cutting of sweet clover should be made before bloom for the most palatable and most nutritious hay.

63. The average production of the dairy cow in the Northwest Station dairy herd for 1923 was 8131 lbs. of milk. The cows were in milk an average of 229 days.

Livestock feeding problems in the Red River Valley are being given much attention at the Northwest Station. Spend a day there to see the results for yourself. Come at any time.

#### POULTRY

64. Moist mashes, green food, buttermilk, grains, oyster shells and grit are necessary poultry feeds.

65. Early hatched pullets are better winter layers than old hens. It pays to cull the flock every year.

66. A poultry house with a straw loft will remove the moisture from the poultry house, if properly constructed.

67. The essentials of a good poultry house are: freedom from moisture; abundance of ventilation; freedom from drafts, plenty of sunlight; rat and mice proof and having good sanitation.

68. Cotton fronts and straw lofts

are proving satisfactory for ventilating poultry houses in this district.

69. Where only a few chickens are to be hatched, natural incubation gives the best results.

70. Use only healthy, vigorous birds in the mating pen.

71. Only by careful breeding, selection and culling of the flock will improvement be made.

72. Pure-bred poultry will lay eggs of higher quality and uniformity than mongrels.

73. Old hens give better results as breeders than pullets.

74. Buttermilk gives better results than water as a drink for young chicks.

75. Chick mortality is much greater among mongrel chicks than pure-bred.

76. Barred Rocks at the Station made better gains per pound of feed fed than did Rhode Island Reds or White Leghorns.

77. Buttermilk, skimmilk, rabbits or animal meat supplies the animal food the poultry needs.

78. Lime water has proved to be a good preservative of eggs at the Northwest Station.

A flock of chickens or turkeys gives a substantial reward when properly handled. The Northwest Station will give you any help or suggestions possible. Plan a personal visit and talk over your problems with the poultry specialist.

#### WHAT OF 1924?

1924 will show a greater trend toward balanced production in the Red River Valley than ever before. Encouraged by the successes, even during the present depressed period, of neighbors who have live stock and have been growing feeds for it, profiting by the experience they have gained, and securing all the information available, many other farmers in 1924 are giving attention to the following

#### PROGRAM OF FARMING FOR THE RED RIVER VALLEY

1. Have dairy cows or beef cattle. In one Red River Valley county, the average farm has only 13 head of cattle per farm. The number should be at least 50. There are 1,333 cowless\* farms in the 11 counties of the Red River Valley.
2. Have a few hogs. In one Red River Valley county the average farm has only 4 hogs per farm. There are 5,671 \*hogless farms in the 11 counties of the Red River Valley.
3. Have a few sheep. The Red River Valley is especially adapted for sheep raising. Wool and mutton bring good prices.
4. Have a good sized flock of chickens. Red River Valley farms average about 60 hens per farm. There are 2,046 henless\* farms in the Red River Valley.
5. Have pure bred sires. No investment brings greater returns.
6. Raise Sweet Clover for Pasture. Every year brings added testimony to the record of the value of sweet clover both as a pasture and as a hay crop.

\* 1920 U. S. census figures.

7. Raise alfalfa for hay. The Red River Valley is favored in the large yields of alfalfa obtained. Many counties are putting on an alfalfa campaign. The Red River Valley will soon lead the state in alfalfa acreage per farm.

8. Plan to grow sugar beets. United States imports 70 per cent of its sugar. Minnesota produces only 10 per cent of the sugar used in this state. Plans for a sugar beet factory to be located in the Valley are under way. This will increase profits from sugar beet raising.

9. Plan to grow more corn. In 1923 corn received more attention than during any previous year. Read carefully the points under corn in the first part of this booklet. Use northern grown seed of early maturing varieties.

10. Plan to grow a limited acreage of potatoes. Grow them on well prepared ground, using treated seed and spraying the vines.

11. Plan to devote a portion of the farm to pure seed production. Raising purebred seed wheat, oats, barley, rye, flax, alfalfa, and sweet clover seed, corn and soybeans will pay you well. Secure the right strains and varieties.

12. Plan to grow some flax. Even with last year's increased production of flax, the United States still imports a large amount of this crop.

13. This does not mean that Red River Valley farmers should not continue to raise wheat and other small grains. The Valley most successful farmers are raising wheat on clean land made possible by rotating crops. Live stock are fed on the roughage.

14. Send for bulletins on growing sweet clover, alfalfa, soybeans, sugar beets, dairying, swine raising, sheep growing, beef production, feeding livestock, value of sweet clover hay for feeding steers, chicken raising, corn, potatoes, small grains, flax culture, and sow thistle control. Write

Northwest Experiment Station,  
C. G. Selvig, Superintendent  
Crookston, Minnesota

#### (Continued from Page 3) FROM FAR AND NEAR

Amy Malakowski, '18, writes from Valley City, where she is attending the State Teachers' College, that the calendar she received serves as a daily reminder of the pleasant days she spent at the Northwest School.

Ingmar Berner, who attended the school in 1913-14, called at the school in December. His present address is Buchanan, Sask., Canada.

James Homme, '22, is attending Bemidji Teachers' College.

John Gronner, '22, is attending Stout Institute, Menominee, Wisconsin.

Laura Kjalberg, '21, Adela Raymond, and Alma Nelson, '22, visited at the school recently en route to Bemidji, where they are attending Teachers' Training College.

Martin C. Anderson writes from Agricultural College, North Dakota, where he is taking a four year veterinary course, that he received and enjoyed the 1924 calendar.