

Northwest School News

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NUMBER 2

Alumni Reunion Scheduled For July 7

CLASS OF '12 CELEBRATES 50TH ANNIVERSARY

The Alumni Reunion at the Northwest School of Agriculture this year will bring back to the campus many of the graduates from the class of 1912. They are celebrating their 50th anniversary. Classes observing reunions this year will include all years ending in "2" and "7". The classes of 1912, 1922, and 1952 have made special plans for the reunion.

Saturday, July 7, will be Alumni Reunion Day.

At the request of a number of alumni, a "Smorgasbord" supper will be served in the Northwest School dining hall starting at 6 p.m. This meal will be available to all alumni, former students, and faculty who have their reservations in by July 2. The cost of the meal will be \$1.00 per person.

Members of the Class of 1912 and their guests are asked to meet in Home Economics—Bede Hall at 4:30 p.m. Each graduate should come prepared with a short history of his activities since graduation. Those graduates who cannot attend are asked to write a letter to the class telling where they are located and what they are doing. This information may be mailed to Superintendent B. E. Youngquist at the Northwest School.

The committee for the Class of 1922 has requested that they meet in the library of Kiehle building at 4:30 p.m. Those who cannot attend are asked to send a letter which can be read to the group.

Members of the Class of 1952 will meet in the Aggie Inn for information from the committee on plans for their reunion. Charles Holmquist and Kenneth Ewing are making arrangements for a special "social" evening for the class following the business meeting.

Alumni attending the reunion will have an opportunity to spend the afternoon in a social way on the Northwest School campus or take in the events of "Pioneer Days" which is being celebrated in the city of Crookston on that day. "Pioneer Day" activities in Crookston include: 1:00 to 2:00 p.m.—Costume Contest—cash awards and all eligible to participate; 2:00 to 3:00 p.m.—Parade of Contestants and Crookston Queens; 3:00 to 5:00 p.m.—Children's Races in Central Park and Free Locomotive Rides for Children; 7:30 to 8:00 p.m.—Concert by the Northwest Singers; and

from 9:00 p.m. until midnight there will be four dances in Crookston—one of which will be for teen-agers.

The Northwest School Alumni Association will have its business meeting immediately following the "smorgasbord" supper. New officers will be elected; also, prizes will be awarded to alumni coming the greatest distance, oldest alumnus, and most recently married alumnus. Following the business meeting, there will be a social hour and coffee in the Aggie Inn where the "grads" can meet and reminisce.

Officers of the Alumni Association are: Glen Torkelson of Crookston, president; John Stromstad of Lockhart, vice-president; and Larry Bergh of Hallock, treasurer. H. H. Lysaker and H. W. Soderburg, of the Northwest School faculty, will serve as co-chairmen in assisting with preparations for the reunion.

Crops Day Set For July 17

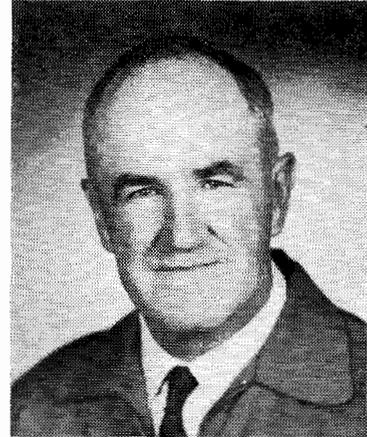
On July 17, the Northwest School and Experiment Station will have its annual Crops and Soils Day. The public is invited.

The program for the day will begin at 9:30 a.m. with a tour to inspect the crops and soils experimental projects at the Station. Women visitors are invited to attend the horticultural program and tour of horticultural research which is scheduled to begin at 10 a.m. There will be a special beef barbecue dinner served at noon by personnel from the Experiment Station.

Dr. Alexander Hodson, head of the Department of Entomology of the Institute of Agriculture, University of Minnesota, will be the speaker at a special Land Grant Centennial program at 1:30 p.m.

Agricultural Extension Service specialists on weeds, insects, plant diseases, and soils will be on hand for a Plant Problem Clinic. Visitors are invited to bring plant disease and insect specimens for identification and discussion with specialists who will be in charge of the clinic.

Crops Day will wind up with a meeting of the Crops and Soils Association at 3 p.m.



Wm. M. Barron Retires

William M. Barron, a member of the teaching staff at the Northwest School of Agriculture since 1942, retired from University service on April 15. Mr. Barron taught farm machinery and internal combustion engines in the Ag Engineering section at the Northwest School. He was always a real friend and popular teacher among the students.

Mr. Barron's immediate plans are to farm with his son, William E. Barron, Jr. The Barrons make their home at 234 Washington Avenue, Crookston, Minnesota.

LEGISLATIVE BUILDING COMMISSION VISITS NORTHWEST SCHOOL AND STATION

The Minnesota Legislative Building Commission, headed by State Representative Eugene P. Knudsen of Kandiyohi, visited the Northwest School and Experiment Station on the late afternoon of June 2. The Commission spent nearly four hours in going over the ten-year building and rehabilitation plan as developed by Superintendent B. E. Youngquist and his staff. The Commission toured the school buildings and the farmstead buildings.

The members of the State Building Commission will study the current and long-range building requirements and then will issue a report of its findings and will make recommendations to the 1963 Legislature.

Members of the Commission who visited the Northwest School campus besides Chairman Knudsen were: Senator J. A. Josefson of Minnesota, Senator Chris L. Erickson of Fairmont,

(Continued on Page 3, Col. 3)

Northwest School News

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THE UNIVERSITY OF MINNESOTA
NORTHWEST SCHOOL OF
AGRICULTURE

B. E. Youngquist, Superintendent
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Northwest School and Exp't. Station
Crookston, Minnesota

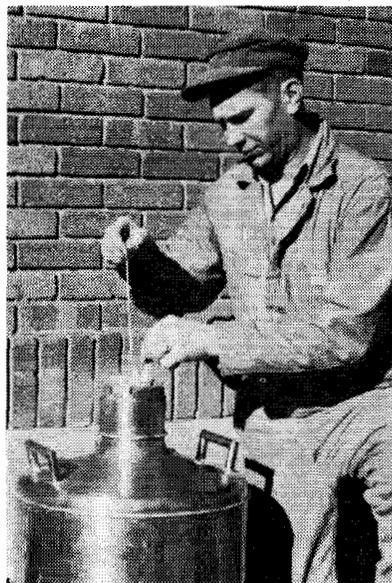
BULL SEMEN STORED AT EXTREME TEMPERATURE FOR DAIRY BREEDING

By E. C. Frederick

Recently, the dairy breeding project at the Northwest School and Experiment Station, Crookston, changed over from a dry ice method of storing frozen semen to liquid nitrogen. Dry ice will store semen at 110 degrees below zero, while liquid nitrogen will hold the semen at 320 degrees below zero. Research work in the Dairy Department at the University of Minnesota and elsewhere has shown that semen will maintain its fertilizing capacity longer when stored at the colder temperatures.

The liquid nitrogen storage tank in use at the Northwest School and Experiment Station is about the size of a 5-gallon milk can. Its capacity is approximately 1,200 individual service ampules of semen. In order to maintain

(Continued on Page 3, Col. 3)



A single service ampule of semen is being removed from the liquid nitrogen storage tank by Martin von Ruden, herdsman at the Northwest School and Experiment Station. In liquid nitrogen, the semen is kept at 320° below zero and will maintain its fertilizing capacity for an indefinite number of years.

HISTORY AND STATUS OF

THE SHEEP FLOCK AT THE NORTHWEST EXPERIMENT STATION

BY D. REIMER

Sheep production in the Red River Valley has shown an increase for several years indicating both the adaptability of this region for lamb and wool production and the profits that are possible from this type of a farm enterprise. Abundant feeds are produced in this region, pasture crops are easily grown, and the summer season is cool so that the spring crops of lambs are easily and cheaply grown for the fall market. The cold dry winters of the Northwest are ideal for the growing of a heavy, dense, high-scoring fleece. The well drained Eastern shoreline areas of the Red River basin are also conducive to the health of sheep. The average flock of well-bred sheep will readily pay its own way under most farm conditions. In addition to producing a dual crop of lambs and wool, sheep help to improve the land through the addition of fertilizer and serve an invaluable asset as weed destroyers. Sheep consume less feed per hundred pounds live weight and generally return greater profits per hundred-weight than do other classes of livestock.

The sheep flock at the Northwest Experiment Station was started as a grade flock of Shropshires in about 1908. A few purebred Shropshires were added in the fall of 1910; the purebreds gradually replaced the grades, and by the mid-1920's the flock was recognized as one of the leading purebred Shropshire flocks in the Northwest. Rams of Senator Bibby breeding were used extensively during the first phases of flock improvement. The lamb crops of 1923 and 1924 were sired by an imported ram, McKerrow's Simon 71, and this breeding seems to have set the type and improvement for the entire flock more so than any previous ram.

The sheep flock serves several purposes at the Northwest Experiment Station. The major emphasis of the flock has been devoted to research, primarily in sheep breeding, although more attention is being given to lamb feeding and flock management as well. A second function of the flock has been to demonstrate the possibilities for improved sheep production in the Red River Valley. A third factor involves the matter of making superior breeding stock available to local sheepmen for the improvement of their own flocks. Finally, both flock records and sheep are used by students during the school year to further their knowledge and experience in profitable sheep husbandry.

At the present time, the flock consists of about 200 Shropshire ewes of

breeding age. One herdsman is in charge of the entire flock and devotes about two-thirds of his time to work with sheep. Accurate records are kept of flock performance, and every animal is included in one or more research projects from birth to market. Two major research projects in sheep breeding are in progress at present. One of these is a long-term study involving inbreeding and selection for efficiency of production. This project was initiated in 1937, at which time the entire flock was "closed", which means that all herd rams were selected from within the flock and no ewes from outside sources have been added. The flock numbered about 70 ewes at the beginning of this inbreeding program, and from three to five rams have been used each year to produce the spring crops of lambs. The flock is not highly inbred in spite of this long period of breeding from within, but does carry considerably more inbreeding than most sheep flocks in the area. The breeding program has been effective in bringing about a high degree of uniformity in the flock, and the selection program has served to gradually improve the performance of the flock as a whole. All selections for the flock are made on an "index" basis which includes the ewes' own performance as well as that of her progeny. The main factors embodied in this selection index include the pounds of lamb and wool produced annually per hundred-weight of ewe. Wool is given a heavier weighting to account for its greater sale value per pound as compared to lamb. Only twin ram lambs from high performing ewes are selected as potential flock rams. In addition to the index, wool quality is also given consideration and visual appraisals are made for wool blindness, soundness of udders, general health and conformation.

The second breeding project involves a study of various systems of cross-breeding for the production of high quality market lambs. Rams of 7 breeds other than Shropshire have been used for the past 4 years on a portion of the ewe flock. Breeds represented in this study include Hampshire, Suffolk, and Columbia, as well as 4 inbred breeds developed by the University of Minnesota, the Minn. 100, 102, 103, and 105 breeds. Hampshire, Suffolk, and Columbia rams have been purchased from private breeders, whereas rams of the inbred breeds have been supplied from University flocks. The Minn. 100 was developed at the North Central Experiment Station (Grand Rapids) from a

(Continued on Page 4, Col. 3)

FROM DROUGHT TO FLOOD

BY OLAF C. SOINE

From the drought of 1961 to the floods of 1962 is an abrupt change in our local weather pattern. The surplus moisture this spring at the site of the University of Minnesota, Northwest Experiment Station located north of Crookston, has certainly recharged our subsoil moisture storage to capacity.

On June 1, the total precipitation for this year measured 9.44 inches, compared to 3.00 inches for this same period in 1961. The 60-year average for this same period is 6.15 inches.

At the close of 1961, the subsoil moisture conditions were somewhat critical even though the total precipitation for the year was only three inches below normal. The rather heavy winter snowfall, which amounted to 3.68 inches of moisture, melted slowly and percolated into the soil. From our early spring soil moisture survey, nearly all of the winter snowfall entered the soil. On June 1, the subsoil to a depth of 60 inches was saturated with moisture.

The extra 3.29 inches of moisture that we have received this year has kept the soil extremely wet and has delayed spring work. This has been largely due to the cool, cloudy, humid weather during May. During this past month, we have had 3 clear, 7 partly cloudy, and 21 cloudy days. Under normal conditions, approximately 36 per cent of our moisture evaporates, but in May evaporation was nearly zero.

The following table gives a summary of the precipitation for 1962 compared to 1961 and the 60-year average.

Precipitation at Northwest Experiment Station

Month	1962 Inches	1961 Inches	60-Yr. Average Inches
January	1.18	0.29	0.56
February	1.33	0.37	0.61
March	0.70	0.28	0.82
April	0.48	1.16	1.52
May	5.75	0.90	2.64
Total	9.44	3.00	6.15
June	1.76*	1.73	3.34

*Rainfall for June 1-14, 1962; amounts for 1961 and 60-yr. average are for entire month of June.

Dr. Olaf C. Soine, Agronomist
Northwest Experiment Station (6-15-62)



THE 37TH ANNUAL WOMEN'S CAMP was held at the Northwest School of Agriculture, June 12-15.

Elected as Women's Camp officers to serve for the 1963 camp were—(pictured above): Reading from left to right—Mrs. Kenneth Koester of Glyndon, president; Mrs. John Thompson of Newfolden, vice-president; Mrs. Myrtle Wells of Graf-ton, N. Dak., secretary; Mrs. J. H. M. Awrey of Hitterdal, treasurer; and Mrs. Berrard Myers of Thief River Falls, sergeant-at-arms.

In attendance at the camp were women from the Red River Valley counties of Minnesota and North Dakota.

13 COUNTIES REPRESENTED AT 4-H WEEK

4-H club delegates from thirteen Northwestern Minnesota counties attended the district 4-H Club Week held at the Northwest School of Agriculture June 4-8.

An interesting program of instruction and recreation was given under the direction of state 4-H club agents and leaders, county Extension agents, and Northwest School staff.

DAIRY BREEDING PROJECT

(Continued from Page 2)

a temperature of 320 degrees below zero, the container must be charged with liquid nitrogen at three-week intervals.

Semen properly prepared and stored in liquid nitrogen will maintain its fertilizing capacity for many years. Calves have been produced from semen stored in the frozen state for eight years. It is too soon to tell how long the sperm cells will live when stored at extremely low temperatures.

The long-time storage of semen gives obvious advantages to a breeding project such as is under way at the Northwest School and Experiment Station. With a good supply of frozen semen on hand, a bull can be used long after his death.

The objective of the dairy breeding program at the Northwest Experiment Station is to develop a high-producing line of Holstein cattle. This line of Holstein cattle would then be crossed with other lines of Holstein cattle in Minnesota and in other parts of the country to determine whether there is high-bred vigor within the Holstein breed. The dairy herd at Crookston, together with the herd at the West Central Station at Morris, is being utilized to develop a Dunloggin line of breeding. The herd is being bred to Dunloggin bulls which go back to Dunloggin Golden Cross Tidy.

Cooperating in the project with the Northwest School and Experiment Station are the Dairy Department of the University of Minnesota, St. Paul, and the Dairy Research Branch of the United States Department of Agriculture.

Dr. E. C. Frederick, Animal Husbandman
Northwest Experiment Station

LEGISLATIVE BUILDING COMMISSION VISITS NWS

(Continued from Page 1)

Senator William C. F. Heuer of Bertha, Senator Harold R. Popp of Hutchinson, Representative Harry Basford of Wolf Lake, and Executive Secretary Edward A. Burdick of St. Paul.

Around and About With NW School Alumni

***News Regarding Northwest School Alumni and Former Students:

***Harvey P. H. Johnson, '30, vice president and general agriculturist of the American Crystal Sugar Company, received the Meritorious Award of the American Society of Sugar Beet Technologists at the 12th biennial meeting held in Denver, Colorado, February 5-8. The award represents the highest honor the Society confers upon any of its members. It is given for meritorious service to the Beet Sugar Industry in North America.

***Three Northwest School graduates were elected by their counties as "King Agassiz" county candidates for King Agassiz II of the 1962 Red River Valley Winter Shows which was held in February. Elected were: Leonard Hapka, Argyle—Marshall; Paul Specht, Mahanomen—Mahanomen; and Wilbur Hallstrom, Red Lake Falls—Pennington. From all county candidates, Herman Natwki of Ada was elected King Agassiz II.

***Lynn Strokland, '62, of Tioga, North Dakota, was critically injured in a car accident recently near Billings, Montana. Lynn will be a patient at the hospital for several months and would appreciate hearing from his classmates. His address: Deaconess Hospital, Billings, Montana. He had been employed in Montana since the close of school in March.

***Dr. A. A. Dowell, professor emeritus of the University of Minnesota who retired in June 1960, was recently awarded the University of Minnesota Outstanding Achievement Medal. This was presented to him in May at the alumni reunion of the College of Forestry and Home Economics. Dr. Dowell was superintendent of the Northwest School and Experiment Station, 1927-1937.

***Richard M. Moe, '59, of Beltrami, has completed a two-year electrical course at the North Dakota State School of Science at Wahpeton, N. D. He received his trade-technical school diploma on May 31 at graduation exercises.

***Mr. and Mrs. T. McCall celebrated their Golden Wedding Anniversary on June 12. Former Superintendent and Mrs. McCall are making their home at 224 South Minnesota, Crookston, Minnesota.

***Mrs. Richard Stenberg (nee Dorothy Setterholm, '39, and her family) visited the Northwest School campus on April 19. Her address: 15004 McGinty Road, Wayzata, Minnesota.

***Vincent Wallerberg, '47, is employed in Milwaukee. His address: 509 Lakeview Ave., South Milwaukee, Wisconsin. Raymond Wallenberg, '50,

is employed in Pico Rivera, California. His address: 7635 Birchleaf, Pico Rivera, California.

***Alan Mattison, '60, has been in the U.S. Navy since 1960. He is presently stationed in Key West, Florida, aboard the submarine USS Chopper.

***James W. Peterson, '58, of Stephen, who enlisted in the U.S. Army in April 1958 spent three years in service. He was overseas in Germany for two of the years. At present, he is employed in Chicago and his address is: 3423 West McLean, Chicago 47, Illinois.

***Kenneth Steinke, '59, of Hamilton, N. Dak., enlisted in the U.S. Navy in May 1959. He is now at the U.S. Naval Air Station, Port Lyoutey, Kenitra, Morocco.

***Joseph M. Jaszczak, '56, is in the U.S. Army. He is now stationed at Co. B-501st S and T Bn., 1st Armd. Division, Fort Hood, Texas.

***The state association of the Future Farmers of America recently gave special recognition to the farm youth leadership activities of Superintendent B. E. Youngquist of the Northwest School. At their state convention in Minneapolis on May 7, the state president of the F.F.A. presented him the gold key of the "Honorary State Farmer"—a walnut plaque and also an embossed certificate as indicative of the signal honor.

***Ronald E. Filipy, '58, of Warren, graduated from Moorhead State Teachers College on June 7.

***Richard Dufault, '55, is employed as an accountant at Land O' Lakes Creameries in Minneapolis.

Marriages

***Miss JoAnn M. Nelson of Crookston to Merle E. Hennum of Donaldson, on February 17, at Crookston.

***Miss Carolyn Haugen of Coon Rapids to Orin Lee of Badger, on March 3, at Middle River, Minnesota.

***Miss Claudia Birkeland of Crookston to V. James Gunderson of Buxton, North Dakota, on April 8, at Crookston, Minnesota.

***Miss Peggy Bjornson of Arvilla, North Dakota, to James E. Preston, of Urichsville, Ohio, on June 9, at Honeyford, North Dakota.

Births

***To Mr. and Mrs. Bert Tollefsen of Beltrami, a son, on March 26, at Crookston.

***To Mr. and Mrs. Clayton Engestad of Fertile, a daughter, on March 20, at Crookston.

***To Mr. and Mrs. Albert Hogland, of Fertile, a daughter, on March 26, at Crookston.

(Continued in Col. 3)

THE SHEEP FLOCK AT NW STATION

(Continued from Page 2)

foundation cross of Rambouillet ewes bred to Border Leicester and Cheviot rams. The Minn. 102's originated at the Southern Experiment Station (Waseca) from a cross of Shropshire ewes by Border Leicester rams, with a slight amount of Columbia and Targhee breeding introduced at a later date. The North Star (Minn. 103) breed was started in 1889 by the late W. W. Bell of Beaver Creek from a cross of the Lincoln, Oxford and Rambouillet breeds. Mr. Bell continued his own program of development until he was in his nineties, and in 1947 transferred a portion of his flock to the University of Minnesota at Rosemount. The Minn. 105 breed was developed at the West Central Experiment Station (Morris) from a foundation cross of Hampshire by Columbia.

These crossbreeding studies have been carried on at several of the University's branch Experiment Stations, and the entire results will be summarized and published when the project is terminated in the fall of 1962.

A portion of the 1961 lamb crop was included in feeding trials at the Northwest Experiment Station. These preliminary trials were designed to evaluate various types of barley for feeding out market lambs. Comparisons were made between dry rolled, wet rolled, whole and pelleted barley rations. Only slight differences were noted between treatments, although the dry rolled barley rations produced lambs with slightly faster average daily gains. Further studies are scheduled to utilize the 1962 lamb crop in evaluating different types of barley rations for fattening market lambs.

The objective at the Northwest Experiment Station is to establish a flock of about 400 ewes with several different breeds represented. The sheep facilities at the Station are scheduled for remodeling and revision to better fit them for research purposes. These additions and changes will provide ample opportunities to study a wide variety of questions concerning the proper feeding, management, and breeding of farm flocks in northwestern Minnesota.

Dr. D. Reimer, Animal Husbandman
Northwest Experiment Station, Crookston

WITH NORTHWEST SCHOOL ALUMNI

(Continued from Col. 2)

Deaths

***Mrs. Lowell Ryden, (nee Elizabeth Erickson, '33), on February 28, at Longview, Washington.

***Henry Rud, '16, on June 29, 1961, at Viking, Minnesota.