

Northwest School News

Four issues published annually by the Northwest School of Agriculture, 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.

VOLUME XLVIII

Crookston, Minnesota, Oct.-Nov.-Dec., 1964

NUMBER 4

NW SCHOOL STUDENTS RECEIVE ATHLETIC AND SCHOLARSHIP AWARDS 1965-66 CAPTAIN-ELECTS ANNOUNCED

At the annual Awards Assembly for the fall term at the Northwest School of Agriculture, which was held on December 11, awards were presented to students who had participated in football and cross-country. Also, Scholarship Certificates were presented to students who had been on the school's Honor Roll for two or four consecutive semesters.

Captains elected by their team members for the 1965-66 football and cross-country teams were announced. Leon Grove of Roosevelt and Robert Bye of Euclid were elected co-captains of the football team. Elected as captain of the cross-country team was Stanley Lambert of Hallock. Stanley Overgaard of Dalton was elected by his team mates as the most valuable player of the Northwest School football team the past season. He received a trophy award.

Scholarship Certificates were presented to the following students: Jerome Winter, Morris; Kenneth Drees, Reynolds, N.D.; Robert Fehr, East Grand Forks; Wayne Pedersen, Grandin, N.D.; Teresa Helmstetter, Roosevelt; LeRoy Luchau, Ada; and Roger Thompson, Kensington.

Receiving the cross-country awards were: Letter "A" — Stanley Lambert, Hallock; Bruce Stromstad, Lockhart; Gary Odegaard, Hickson, N.D.; Kenneth Duden, Euclid; and Daniel Kasprick, Grafton, N.D.; Chevron Awards — Arthur Sheldon, Bagley, and Wayne L. Pedersen, Grandin, N.D.; Captain's Star — Arthur Sheldon.

Athletic Letter "A" or Chevrons for football were awarded to: Letter "A" — David Felton, Longville; Lyle Wenner, Hitterdal; James Wallace, Euclid; Brian Bohnsack, Hillsboro, N.D.; Donald Kovar, East Grand Forks; Gary Weiss, Red Lake Falls; Leon Grove, Roosevelt; Darrell Brogren, Ulen; Richard Piker, Angus; Peter Novotny, Borup; Bruce Nelson, Goodridge; Royal Rivard, Argyle; Ronald Bye, Euclid; Richard Battles, Warrad; Paul Shelstad, Doran; and Glenn Amiot, Grand Forks, North Dakota; Chevron Awards — Richard Muir, Hillsboro,

N.D.; Henry Weiland, Euclid; David Lambert, Hallock; Richard Dolan, Grafton, N.D.; Vere Vollmers, Wheaton; Conrad Larson, Morris; Stanley Overgaard, Dalton; Eldred Evenson, Drayton, N.D.; Donald Lubinski, Euclid; Edward Kovar, East Grand Forks; and Robert Bye, Euclid; Captain's Star — Eldred Evenson and Conrad Larson.

Presiding at the awards assembly was Superintendent B. E. Youngquist. The awards were presented by E. N. Reiersgard, principal; H. H. Lysaker, football coach; and B. C. Beresford, cross-country coach.

AID, Inc. Honors B. E. Youngquist

Dr. B. E. Youngquist, superintendent of the Northwest School and Experiment Station, was recently presented with the Agricultural Leadership Award which is given annually by AID, Inc. This was their seventh annual award.

The honorary award was made on December 5 at a meeting of AID, Inc. held during the Area Products Show at Grand Forks, N.D. Making the award was A. V. Hartle, Fergus Falls, president of Otter Tail Power Company, one of the three power producers which make up AID, Inc. — Agricultural and Industrial Development, Inc. — a group devoted to promoting farms and industry in the Red River Valley.

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Homecoming Queen and Her Attendants

Elected as 1964 "Homecoming Queen" by the student body, Janis McElheney was crowned Queen at the Homecoming activities held at the Northwest School of Agriculture on October 30. She was crowned Queen by Co-Captain Conrad M. Larson of the Northwest School football team.

Janis Alane, a Senior, is the daughter of Mr. and Mrs. Harold McElheney, Jr. of Rippey, Iowa.

The four girls chosen from the Senior class as attendants to the Queen were (reading from left to right): Front Row—Darlyne Kovar of East Grand Forks and Mary Jean Arnold of Angus. Back Row—Lois Sivertson of Ulen and Judy Ovsak of Euclid.

Northwest School News

Issued Quarterly by
THE UNIVERSITY OF MINNESOTA
NORTHWEST SCHOOL OF
AGRICULTURE

B. E. Youngquist, Superintendent
Office

Northwest School and Exp't. Station
Crookston, Minnesota

POTATO HAIL DAMAGE STUDIES

By B. C. Beresford

Two years of research has now been completed at the Northwest Experiment Station, Crookston, on simulated hail damage to potatoes. A third trial will be conducted in 1965 to complete the work. Hail occurs during the growing season in the Red River Valley and may cause considerable damage to potato plants by defoliation of the leaves and mutilation to the stems. There will be losses in yields of potatoes depending on the amount of plant damage and the time during the growing season that the damage occurred. Information from these experiments should provide guides for systematically estimating losses resulting from hail damage.

The trials were conducted with the potato variety Red Pontiac which is commonly grown in the Red River Valley area. Planting date was the second week of May, with harvest date the third week in September. These plots were grown according to accepted practices for commercial production in the Red River Valley. Potato plants received injury (simulating hail damage) with a hand flail three times during the growing season. Injury was applied at 50 per cent full bloom stage the first week of July, full bloom stage the middle of July, and 50 per cent past full bloom the end of the month. On each date of injury, 25 per cent, 50 per cent, 75 per cent, and 100 per cent of the foliage of each plant in each plot was damaged with a hand flail to simulate hail damage. A check plot which was undamaged was included in each degree of injury for each date of injury. Numbers and weights of tubers in size and grade classifications were made at digging time. Specific gravity determinations were made from samples from each plot at harvest time.

After two years trial, the trend is noted that yields of Red Pontiac variety decrease as the degree of damage applied to the foliage increases. The greatest loss in total yield and No. 1 yield occurred when damage was inflicted at 50 per cent past full bloom stage of maturity, in both 1963 and 1964. The greatest recovery in yield

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BEEF CALVES ARE FED SUGARBEET TOPS IN NWS BEEF TRIALS

By H. F. Windels

In accordance with the increasing importance of forage crops in the Red River Valley and their value in beef cattle rations, the beef feeding experiment just getting underway at the Northwest School and Experiment Station was designed to continue — on a larger scale — the forage evaluation program initiated last year.

This year, the comparative feeding value of four different roughages fed during the first or high roughage phase of the experiment will be investigated. The recently-completed expansion of the Station's beef feeding facilities from four lots to the present eight lots enables us to make these four comparisons and still have each treatment replicated twice. The roughages to be compared are sugarbeet-toplage (45-50% moisture), high-quality alfalfa haylage, high-quality corn silage, and high-quality alfalfa hay. These roughages will be full-fed and supplemented with 4 - 6 pounds of barley per head per day to increase the energy content of the rations. A protein supplement will be used as necessary to meet the protein requirement and a suitable mineral mixture will be fed free choice. All animals will be implanted with stilbestrol and will receive supplemental Vitamin A.

Another change which was instigated this fall was the use of steer calves weighing approximately 500 pounds rather than yearling steers. It appeared desirable to conduct this study on calves because the narrow margin on older cattle suggests that younger cattle to which roughage can be fed for a longer period of time may well be a more profitable type of operation.

NW STATION CONTINUES RESEARCH WORK WITH SUGARBEETS

By Olaf C. Soine

SIMULATED HAIL DAMAGE: Of the several experimental trials with sugarbeets at the Northwest School and Experiment Station, Crookston, perhaps the most interesting one deals with simulated hail damage. In this experiment, the sugarbeet plants are damaged by cutting off from zero to 100 per cent of the leaves at definite periods during the growing season. The first injury is made when the plants are in the eight-leaf stage and ends with an injury on September 15. Several determinations are made on these beets but the most important ones give the yield of roots, sugar, and percentage of sugar.

Three years of data show that the most critical period of hail damage to beets is from July 10 to August 15 as measured by the yields of beets and sugar.

UPTAKE OF PHOSPHATE: A second experiment is designed to measure the uptake of phosphate from various combinations of phosphate fertilizer—alone, and in combinations with nitrogen. In a similar experiment, corn utilized more phosphate in combination with nitrogen than from phosphate alone.

Two years' data will be available this winter from this experiment, but no conclusive evidence shows that sugarbeets will perform like corn. The results do show that sugarbeets take up larger amounts of phosphate in the early stages of growth and gradually taper off at the end of the season.

MINOR ELEMENTS: There is considerable interest in the "minor elements" for plant growth here in the Red River Valley. To help answer this question for sugarbeets, samples of the tops and roots were taken from a fertilizer trial and sent to a laboratory at Ohio State University for analysis of eleven minor elements. The data has not been completely analyzed but there does not seem to be any shortage of minor elements in the soils of this area.

AVAILABLE SOIL MOISTURE: Another interesting study deals with the available soil moisture under three different cropping systems including corn, grain, and sugarbeets. Soil samples are taken once a month from early spring to late fall from these plots and the available moisture is determined down to a depth of five feet. Data collected over the past three years show that alfalfa and sugarbeets use the greatest amount of water dur-

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NORTHWEST SCHOOL

CALENDAR

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Winter Term Opens

Monday, January 4, 1965
Classes Begin

NWS Farmers' Week and RRV Winter Shows

Feb. 20 - Feb. 25, 1965

Baccalaureate Services

Sunday, March 21, 1965

Commencement Exercises

Friday, March 26, 1965

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

***John (Reuben) Thompson, '39, received his Ph. D. Degree in agronomy with a major in crop production from Iowa State University in July 1964. Dr. Thompson is an assistant professor and agronomist at the Southern School and Experiment Station, Waseca, Minnesota. While attending the Northwest School, his home was in Underwood, Minnesota.

***The Reverend Russell C. Lee, '49, is serving as pastor for the Faith American Lutheran Church at Albuquerque, New Mexico. His brother, the Reverend Harris W. Lee, '47, is serving as pastor in the Lakeview Lutheran Church, St. Paul. While attending the Northwest School, their home address was Rt. 4, Fosston, Minnesota.

***Dr. Lyall Bjornson, '59, formerly of Arvilla, N.D., is now enrolled for advanced work in the Bowman-Gray School of Medicine at Winston-Salem, North Carolina. He graduated from the School of Medicine, University of North Dakota, on May 31, 1964. Following his graduation, he lived in Africa for two months where he worked in a hospital at Nigeria, Africa.

***Miss Retta Bede, a member of the Northwest School faculty 1925-1957 and now retired, has recently moved. Her new address: 1311 East 1st Street, Duluth, Minnesota 55805.

***Donald Strickler, '62, of Euclid, is enrolled as a Junior at the North Dakota State University, Fargo, N.D.

***S/Sgt. Richard Schleicher, '51, formerly of Frazee, Minnesota visited the Northwest School campus. He is stationed at the Grand Forks Air Force Base, Grand Forks, N.D. He and his family live at 143-B Korina Avenue.

***Daryl A. Krogh, '58, formerly of Mayville, N.D., is employed at the Control Data Corporation, St. Paul, Minnesota.

***Orvin Drangstveit, '55, formerly of Goodridge, is employed as Journeyman Optician at the Walmen Optical Company, Grand Forks, N.D. His address: 1311 - 7th Avenue, North.

***Roland F. Wentzel, '37, is a Vo-Ag instructor in the High School at Fortuna, California. Mrs. Wentzel is the former Evelyn (Peggy) Kroog, Sp. 1933-34.

***Mr. and Mrs. Henry Boeddeker (nee Marilyn Jahnke, '59) are now making their home in Henning, Minnesota. Henry ('49) graduated from Mayville State College last May and is now librarian in the Henning Public School.

***Dr. Diedrich Reimer, a former

member of the Northwest School faculty who resigned in March 1964 to accept a position with the University of Hawaii, has recently received a promotion. In addition to his research work in the Animal Husbandry Department, he will serve as superintendent of the North Hawaii Experiment Stations (three stations) two of which have beef cattle on them and a third which is a horticultural station. Dr. Reimer and his family live at 103 Punahale Street, Hilo, Hawaii 96720.

***Dell Christianson, '56, of Thief River Falls, was recently appointed to the state's unit of Board of Directors of the Peace Corps Service Organization. He is a former Peace Corps volunteer who completed his tour of duty in West Pakistan in July 1963. Mrs. Christianson, a former Peace Corps volunteer, was elected also to the Board of Directors. Dell is now employed in the Union State Bank of Thief River Falls.

***Jeanette C. Thureen, '60, formerly of East Grand Forks, was appointed in October 1964 as county home agent in Becker county. She is a 1964 graduate of the University of North Dakota and has a bachelor of science degree in home economics.

***Beverly Shelstad, 63, of Doran, was one of four Minnesota young people who represented Minnesota at the National 4-H Club Conference in Washington, D.C. in April 1964. She was chosen as a delegate to the conference. Selection is based on service to the 4-H club and county as officers and junior leaders, and on records, skills, and achievements in specific 4-H projects. She is a freshman student at the University of Minnesota and majoring in Home Economics. In October 1964, she was the recipient of a \$300 scholarship. She serves as a part-time organist at the Lutheran Center at the University.

***The Reverend Richard J. Bonner, '45, is now serving as pastor of the Transfiguration Lutheran Church at Berkeley, Illinois, a suburb west of Chicago. Pastor Bonner had served the Bethany Lutheran Church of East Grand Forks, Minnesota, since March 1961 until he was called to begin his new duties in Illinois in October 1964. Pastor Bonner is a native of Chicago and attended the Northwest School while he and his parents were residents of that city.

Marriages

***Miss Jean Marie Danielson, of East Grand Forks, to Dale LeRoy Myerchin, of Crookston, on December 5, 1964, in East Grand Forks. Their home address:

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NWS ALUMNUS IS GEOGRAPHY TEACHER AND WORLD TRAVELER

Arthur M. Grove, a 1931 graduate of the Northwest School of Agriculture, has three major enthusiasms — he teaches geography, he travels, and he is a "collector" on his travels. He is a native of Roosevelt, Minnesota, and lived there while a student at the Northwest School.

During the school year, Dr. Grove is a professor of geography at Mankato State College, Mankato, Minnesota,



Arthur Grove

where he has taught thirteen years. Summers, he travels. He has visited 62 countries since his first "big trip" in 1946 to China. Five years ago he went around the world. From all his journeyings, he brings back the "rare collections" with which his house is furnished.

While in Shanghai, China, he served as a relief and rehabilitation administrator for two years, doing agricultural analysis of famine areas. Last summer, he did not take a trip; however, he taught geography at the Fort Bragg, North Carolina, Army Base. A previous leave away from Mankato had combined travel and teaching: Four years ago he taught in Pakistan, India, on a Fulbright grant.

Although Grove has made four trips to Europe, he has never been to the Balkans. So, his tentative plans for future trips include visits to Yugoslavia, Hungary, and Romania, adding three countries to his travel record and first hand knowledge of geography.

His home address: 2003 Roe Crest Drive, North Mankato, Minnesota.

COL. ISAACSON, '39, LED RESCUE MISSION

Air Force Colonel Clayton M. Isaacson led the United States planes which carried Belgian paratroopers into the Congo on November 24, 1964 to release hostages held by Congolese rebels at Stanleyville, Belgian Congo, Africa. The American C130 transports commanded by Col. Isaacson carried the paratroopers on the mission. At least ten C130's were involved.

He is a Northwest School graduate — class of 1939. While attending school, his home was in Mahnommen, Minnesota.

Isaacson was a jet fighter pilot during the Korean conflict and a World War II ace. He flew 355 combat missions in both wars and served in Formosa with the U. S. Military Assistance Advisory Group as chief adviser

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MISSING IN ORIGINAL

NEW DAIRY RESEARCH FACILITIES AT NWS NOW

BY G. I.

A new barn and milkhouse have been added to the dairy facilities at the Northwest Experiment Station, Crookston. The 36 x 166-foot barn was built this past summer and the milkhouse is in the final stages of construction.

Sixty dairy cows will be housed in the new facility which utilizes the comfort stall system. Comfort stalls give cows more freedom than do stanchions. Each cow is tied by a chain which is connected to a leather strap around the neck. Each stall is six feet in width and six and one-half feet in length. This extra length and width allows the cow plenty of room to lie down and minimizes injuries particularly to the udder. In addition, the milking machine operator has more area in which to work when doing the milking.

The barn is equipped with a modern ventilating system. Air from the attic is utilized which enters through narrow opening between the wall and ceiling. The fans have the capacity to change the air in the barn every five minutes. Windows are of solid glass block construction and are not part of the ventilating system.

A milk transfer system or "Step Saver" is used to transfer milk from the barn to the 700-gallon bulk tank. This is a convenient, easy, and inexpensive way to convey milk from the barn to the milkhouse and works well with our system of collecting data for

research as it allows us to use the conventional bucket milkers so milk weights and samples can be taken any time as needed.

The feeding of high quality forage is being stressed in the dairy research program. All of the first crop alfalfa was stored as haylage. By feeding early cut quality forage as haylage, grain supplement costs have been reduced because of the greater feeding value (high energy) obtained from the forage. Early cutting and storage of haylage has other advantages; namely, less weather damage compared to dry hay, the crop is removed before soil moisture is depleted, and the second growth is able to take advantage of the middle and late June rains.

Other research under way with the animals in the new barn is a quarter milking study where some cows are milked with a special milker so that individual production of quarters can be recorded. The results will give a better understanding of effects of Mastitis on individual quarters, reasons for normal variation in milk production, composition, milking rate, and yield.

Physiological research in milk production is also being conducted. Oxytocin, the milk letdown hormone, is being studied and the role of estrogen and progesterone in the control of reproduction are also being investigated.

B. E. YOUNGQUIST HONORED

(Continued from Pg. 1)

Superintendent Youngquist was presented with a plaque denoting his service to agriculture in the Red River Valley.

AID, Inc. was formed to boost farm resources and processing of farm produce in the Red River Valley, to stimulate locally-owned business, and to promote development of the 30-county area served by the three electrical producers.

COLONEL ISAACSON

(Continued from Pg. 3)

to the Nationalist Chinese fighter wing. During his sixteen months in Korea, he flew 125 missions. He has also served as senior Air Force officer adviser to the Minnesota Air National Guard.

At present, Col. Isaacson is a staff officer with the U. S. Strike Command at MacDill Air Force Base, Tampa, Florida. He and his family are making their home in Tampa. Two of his children, Bruce and Marilyn, are enrolled at the Northwest School this year.

POTATO HAIL DAMAGE STUDIES

(Continued from Pg. 2)

from simulated damage — when compared to checks — was made when damage was applied at 50 per cent full bloom stage of maturity. Specific gravity of tubers at harvest time did not vary with degree of simulated hail damage or with stage of growth when the damage was applied.

SUGARBEET RESEARCH

(Continued from Pg. 2)

ing the entire season. MECHANICAL - CHEMICAL WEED CONTROL: This past season, a ten-acre field of sugarbeets was set up as a chemical-mechanical weed control study. The field was treated with Avadex before seeding and with T.C.A. after planting. The beets were mechanically thinned and the field was harrowed after the beets emerged. No hand labor was used for thinning or weeding during the entire growing season. This field averaged 10.6 tons of beets per acre which is rather low but will be close to the average yield for this area.

sor at the Northwest School and Experiment Station, was awarded his Ph. D. degree at graduation exercises held on December 19, 1964 at the University of Minnesota, Minneapolis.

Dr. Windels received his Bachelor of Science degree in 1955 and was awarded the Master of Science degree in 1962 — both from the University of Minnesota.

He assumed his duties in the Animal and Dairy Husbandry Department at the Northwest School and Station, Crookston, on September 16, 1964.

AROUND AND ABOUT WITH NW SCHOOL ALUMNI

(Continued from Pg. 3)

502 Eighth Ave., So., East Grand Forks, Minnesota.

***Miss Mary Kroll, of Argyle, to Rodger A. Kluzak, of East Grand Forks, in November 1964 at Argyle, Minnesota. They are making their home at Warren, Minnesota.

***Miss Shirley Jean Piker, of Angus, to Ordell James Enstad of Arvilla, N.D., on October 10, 1964, at Tabor, Minnesota.

***Miss Judy Ann Rivard, of Oslo, to Kenneth John Schuster, of Grafton, N.D., on November 17, 1964 at Oslo, Minnesota. They are making their home in Grand Forks, N.D.

Births

***To Mr. and Mrs. James E. Preston (nee Peggy Bjornson, '58), a daughter Mary Elizabeth, on October 17, 1964, at Grand Forks, North Dakota. Their address: 12 Manitoba Avenue, Grand Forks, N.D. 58201.

***To Mr. and Mrs. Donald Huot, of Red Lake Falls, a daughter on November 23, 1964, at Crookston, Minnesota.

Death

***Walter W. Turgeon, '24, of Brooks, Minnesota, on November 1, 1964, at Grygla Minnesota.

YOU ARE INVITED

to the
55th Annual
**NORTHWEST SCHOOL
FARMERS' WEEK**
and
**RED RIVER VALLEY
WINTER SHOWS**
Crookston
Feb. 20 Through Feb. 25
and
Feb. 26 Through Feb. 28

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