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ANNUAL REPORT OF THE DICKINSON EXPERIMENT STATION

Raymond J. Douglas, Superintendent

We at the Dickinson Experiment Station believe that we are building a program that will keep making contributions to the agriculture of the West River Area. The problems of our West River ranchers and farmers become the problems of the North Dakota Agricultural Experiment Station resting specifically upon the shoulders of the Dickinson Experiment Station, when their problem falls within the scope of work we are doing or can handle. All of our efforts are dedicated towards building an experimental program that will act as a guiding hand to an ever changing agriculture.

Our projects and program of our work for the future are covered in the following programs of improvements, expansion and maintenance for the Dickinson Experiment Station.

I. LAND.

A. A tract of 68.9 acres of land along the south side of Section 5-139-96 was sold to a group of men for $11.600.00 to be used as a site for the Queen City Refinery.
B. We purchased 160 acres of land, the SW 1/4 of Section 29-140-96, for $9,600.00 and took an option on 160 acres, NW 1/4 of Section 32-140-96, for five years for a consideration of $2,300.00 (to apply on the purchase of $9,600.00) with the option to run for five years and the remaining $7,300.00 to be paid up in five years. The lease on this land is for $350.00 per year, which is approximately 4 3/4% interest on the $7,300.00 payable on or before January 1 following each crop year.

II. BUILDINGS.

A. Most of our buildings were painted in 1953, which is the first step in a program of painting the building every

two or three years on each farm - so they will have a first class appearance.

B. Ask for an appropriation in 1955 for a new seed house of about 10,000 bushel capacity adequate with storage and cleaning facilities for handling all of the grain raised at the Dickinson Experiment Station.
C. Using the material in the barn on the Agronomy Farm and the old barn at the Livestock Farm as a basis, construct a ranch type barn near the corral. The new barn to be adequate for our horses, dairy cows and a hospital wing for handling animals that need special care, including cows at calving time.
D. Move the cabin at Pyramid Park on a new cement foundation, cover the present structure with paper, side it over with the siding removed from the old house on the farmstead at Pyramid Park, and shingle the structure. Remove the inside lining in the cabin so that there is only one room, which will eliminate the rodent problem. The lumber in the old house to be salvaged with that remaining after repairing of the cabin to be taken to the Dickinson Experiment Station for repair work.
E. Complete the corral on our summer range so that it will be of adequate size to hold 200 head of cattle. The garage which at present is used for a holding pen can be moved out to a new location, set on a concrete foundation and used for a storage room.

III. IMPROVEMENTS.

Buildings

A. Remodel the kitchen in the Superintendent's residence at the Agronomy Farm into a modern kitchen.

General

A. Build and replace where necessary all of the fences on the Dickinson Experiment Station so that our entire acreage is surrounded by a good four barbed wire fence with posts one rod apart.
B. Dig another well at the Livestock Farm, adjacent to the hog house so that there will be two wells on our livestock water line. These should be connected so that during normal operation the present well located in the basement of the house will feed the water line up to the hog house, and the well located at the hog house will furnish adequate water under pressure for that project.
C. Install a fountain water system, electrically heated during winter, so that all of our hog pasture lots will be

connected with an automatic water supply during the entire year.

D. Seed all the buffer strips not already seeded on our contour strip cropping area with a grass mixture of crested and slender wheatgrass including alfalfa in an effort to provide adequate hay for our beef cattle herd in a normal year.
E. Construct a dam on the NW 1/4 of Section 5 so that we can control the spring run-off and the water following heavy rains to irrigate a tract of alfalfa of approximately ten acres.
F. Level and seed the water ways on the new land purchased for the Dickinson Experiment Station, this to be done in line with the recommendations by the Soil Conservation Service. The mixture seeded to include alfalfa to provide the maximum hay for maintaining our beef cattle herd.
G. Two additional cattle lots were constructed in 1953 so that we now have 12 lots for experimental cattle. Water was piped into the new lots. A new lane was built with adequate gates, holding chute, etc., so that the cattle can be taken directly into the corral and through scale house and weighed or worked on without danger of any animals getting away.
H. A second trench silo was constructed with a capacity of about 700 tons.
I. An electric fan was installed to remove the dust from the feed room at the hog house.
J. A four barbed wire fence with posts one rod apart was constructed on the Livestock Farm along the line where the new Highway 10 was built. We also built 80 rods of new line fence of the same construction.
K. The tops of the posts in the fence line next to the county road in and in the hog lots, were painted white, down about twelve inches or so to the first wire. The gates to the hog lots were painted white.

IV. MODEL PROJECTS.

A. Each year maintain a model garden at the Dickinson Experiment Station to provide farmers and ranchers in the West River Area with the opportunity of inspecting the type of garden recommended by the Horticulture Department at the North Dakota Agricultural College.
B. Maintain a model poultry flock, and handle it throughout the year as recommended for a farm or ranch in the West River Area.
C. Maintain our orchards and add new varieties when available so that those interested in orchards can check on the varieties of apples, plums and cherries recommended for the West River Area.
D. Make the necessary replacements in the shelterbelts so that they are replanted with trees that will thrive

satisfactorily in western North Dakota. Make new planting where necessary to provide adequate protection and improve the appearance of our farms.

E. Investigate the possibility of establishing a small farm type model dairy of sufficient size to be self supporting at the Dickinson Experiment Station. This dairy to provide room for from 3 to 6 dairy cows.

V. INFORMATION.

A. Plan improvements, each year, in our Annual Field Days for both crops and livestock.
B. Station tours are provided throughout the summer for interested groups.
C. Prepare news releases once each week on timely topics, and cooperate with extension service, using release each week in area radio broadcast.
D. Prepare releases in the form of bulletins, articles for bimonthly, etc., on each project carried at the Dickinson Experiment Station when such a release is in order.
E. Give best service possible when called upon to help in community and area agricultural projects.
F. Keep weather records for the United States Department of Commerce which includes :

1. Maximum and minimum daily temperatures and temperatures at time of reading (7 A.M)
2. Soil temperature recording chart.
3. Average wind velocity for a 24 hour period.
4. Daily evaporation from April 1 to October 1.
5. Daily precipitation record.

VI. LIVESTOCK PROGRAM.

A. Beef Cow Wintering Trials. Hereford Beef Cows in calf are kept in dry lots from November 1 to about May 5 and fed at different levels using corn silage and two kinds of hay, both with and without protein supplement. Three lots of 10 cows each are fed the following 'normal' rations:

Corn Silage - 30 lbs.	Corn Silage - 30 lbs.	Corn Silage - 30 lbs.
Crested Wheatgrass - 10 lbs.	Prairie Hay - 10 lbs.	Prairie Hay - 9 lbs.

		Soybean Oil Meal - .8 lbs.

Three other similar lots receive 3/4 as much of these same feeds. This feeding trial studies the effect of different winter rations upon the cows and upon their ability to maintain profitable calf production.

B. Beef Calf Wintering Trials. Hereford calves are weaned November 1, and placed in lots on two levels of feeding until about May 5, then turned on pasture without supplemental feed until the following November 1. Rations used are:

Corn Silage - 25 lbs.	Corn Silage - 20 lbs.
Crested Wheatgrass Hay - 4 lbs.	Crested Wheatgrass Hay - 4 lbs.
Threshed Oats - 2 lbs.	

Winter gains and gains of the succeeding summer are observed to determine the profit that may be realized with the steers and to determine what the effect may be upon the future usefulness of the heifers as breeding cows.

C. Fattening Yearling Steer Trials. Yearling Hereford steers are fed from November 1 to about April 1, on the grains and roughage's most commonly available to the western North Dakota cattlemen to determine the most economical fattening ration. Our aim is to utilize roughage's to the maximum, with limited use of concentrates and supplements. Rations used are:

Rations	I	II	III
Corn Silage	50 lbs.	50 lbs.	50 lbs.
Purdue Supplement A Modified	3.5	---	---

Soybean Oil Meal	---	2 lb.	3 lb.
Steam Bone Meal	---	.2 lb.	.2 lb.
Mineralized Salt	---	.07 lb.	.07 lb.

This may open a great new industry in western North Dakota - the fattening of beef cattle for market. This would make it possible for the rancher or livestock farmer to fatten his feeder cattle for market in case he wants to, adding to his income as a producer of feeder animals the income of the corn belt feeder.

D. Increase our cow herd to 100 good breeding cows. This should be accomplished by November 1, 1954.
E. Continue our project on new methods of Horn Fly control - add to this Heel Fly control, if possible.
F. Our herd of breeding cows was tested for T.B. and Bangs; there were no reactors.
G. Swine Development Program.

1. Swine Breeding Program. Duroc Jersey and Yorkshire hogs are maintained in pure lines, and crosses are made between the two breeds. Pigs of pure breeds and cross breeds are all finished together to determine how the pure breeds compare with crosses for commercial pork production in Western North Dakota.
2. Summer Pig Pasture Trials. Many annual pasture crops are seeded in one acre lots and subjected to grazing by feeder pigs during the period June 1 to September 15. Pastures are observed for palatability, carrying capacity, drought resistance, persistence, and for effectiveness in saving feed required to finish the pigs to market weights. Alfalfa pasture is also used, and one lot of pigs is fed in dry lots as a check on all pastures. Pasture crops tried have been winter wheat, winter oats, winter rye, winter barley, rape and oats, spring rye and sudan grass.
3. Fall Pig Feeding Trials. Fall pigs are divided into lots and fed different grains and combinations of grains to determine the most satisfactory ration that can be formulated from feed grains commonly available to hog raisers in Western North Dakota. Barley and oats have been most used, separately, or in varying combinations. Incidental to this trial is the development of suitable low-cost housing for pigs in this area for winter.

VII. GRASS AND LEGUME INVESTIGATIONS.

A. Preliminary trials. Material for testing in preliminary studies is usually seeded in cultivated rows or in small test plots. At the present time seven grass and legume nurseries are being kept, or are in the process of establishment. These are (1) North Dakota Agricultural Experiment Station alfalfa and birdsfoot trefoil nursery with 7 strains of alfalfa and 5 of birdsfoot trefoil; (2) alfalfa and native legume nursery - 14 strains of alfalfa and 5 native legumes; (3) Dryland alfalfa nursery - 14 strains of alfalfa; (4) uniform birdsfoot trefoil nursery - 9 strains of trefoil; (5) Uniform bromegrass nursery - 14 strains of smooth brome; (6) Uniform intermediate wheatgrass nursery - 4 strains of intermediate wheatgrass; (7) North Central sweetclover nursery - 5 strains of sweetclover.

B. Field Plot Tests. The field plot tests of grasses and legumes consist of larger plots of grasses, legume, or combinations of the two, which are studied more intensively than the small nursery plots. In general most of the field plots are subject to clipping as pasture, as delayed pasture, and as hay. Some of the plots are maintained for the purpose of determining seed production. At this time six field plots are underway. These are (1) Grass and legume mixture trial - 15 combinations of grasses, grass mixtures and grass and alfalfa mixtures; (2) Straight plot and grass mixture trials - 30 species of grass and grass mixtures; (3) Grass seed production trial - 6 species of cool-season grasses in rows and in drill plots for seed production studies; (4) Sweetclover yield test - sweet clover, one white and one yellow, in drill plots and in cultivated rows to determine yield under the two conditions; (5) Nitrogen fertilization of old crested wheatgrass stands - spring applications of 33  % NH_4NO_3 at 50, 100, and 150 lbs. of N. Hay yields and seed yields determined; (6) Renovation of crested wheatgrass fields by fertilization, cultivation, and seeding of legumes.

C. Studies of native grass under North Dakota Agricultural Experiment Station Purnell Project #140. These studies are concerned with the forage production of native grass ranges and pastures in relation to botanical composition and have the overall objective of establishing the ecological basis for the most effective management of the native grass and grazing lands. The studies include: (1) Forage production in relation to botanical composition - determination of forage yield by clipping in 28 sites. (2) Forage increment study - forage production by species at different times during the season (3) Growth and development of range plants basic phenological studies of the development of range plants in relation to precipitation and temperature. (4) Influences of grazing and climate on range vegetation - 200 permanent quadrats and 4 large exclosed areas - grazing is not controlled. (5) Range forage production in relation to precipitation and soil moisture - yield of forage from 8 native grass vegetation types in relation to soil moisture and precipitation. (6) Influence of date of

beginning clipping on forage production of native grass. The objective of this study is to determine the possible influence on total forage production of deferring grazing of native grass in the early part of the season. Consists of 36 quadrats in two vegetation types clipped at 10 day intervals, beginning May 10.

D. Studies of native legumes under North Dakota Experiment Station Project Hatch #34. Studies of abundance and distribution of native legumes in native grass vegetation have been made. Certain species showing some promise as forage plants have been increased and seed is available for small plot trials. Life history studies of native legumes are being continued with special attention being given to five selected species.
E. Studies that should be undertaken.

1. Grazing trials with early season pastures.
2. Grazing trials with grass and alfalfa pasture combinations
3. Comprehensive study of alfalfa as a crop including methods of establishing strands, strain testing, grazing tests, and seed production problems.
4. Possibilities of introducing alfalfa and other legumes into native grass without total destruction of the grass cover.
5. Production and utilization of grass silage in southwestern North Dakota.
6. Seeding and seed bed practices with grass to insure more certain establishment of good grass strands under the climatic conditions of southwestern North Dakota.
7. More comprehensive investigations of the place of fertilizers in producing grass and legume crops.

VIII. INVESTIGATIONS IN AGRONOMY AT THE DICKINSON EXPERIMENT STATION.

A. Variety trials with wheat, oats, barley and flax. The variety trials are necessary in order to determine what varieties are best adapted to the district, to compare newly developed strains with standard varieties and to determine the range of adaptability of varieties showing promise in other grain growing areas of the United States. Each year varietal trials with 20 to 30 wheat varieties, 18 to 24 oats varieties, 15 to 20 barley varieties and 15 to 20 flax varieties are conducted.
B. Nursery work with wheat, oats, barley and flax. Each year the Dickinson Station cooperates in growing the Uniform Regional nurseries of wheat, oats, barley and flax made up and sent out by the United States Department of Agriculture. In addition, the Dickinson Station: Maintains separate station nurseries for the

purpose of further testing material promising for this area from the Regional nurseries which has been dropped from the Regional trials. Carries on a small scale hard red spring wheat breeding and selection program.

C. Rotation and Tillage Trials. Crop rotation and tillage trials begun in 1908 are presently being continued to maintain the crop history of these plots intact until the best disposition can be made of land in further experimentation.

D. Roughage Trials. Designed to compare relative values of several roughage crops for feed production and quality. This trial ties in with the steer feeding trials being conducted on the Livestock Farm.

E. Corn Trials. Each year approximately 20 varieties of corn are included in the Dickinson Experiment Station corn nursery, material in this trial being furnished by the North Dakota Agricultural Experiment Station.

F. Fertilizer Trials. The Dickinson Experiment Station is presently cooperating in two soil moisture experiments with the Soils Department, North Dakota Agricultural College. Fertilizer rate work on corn is being conducted for the second year. Plans are to gradually change some of the Rotation and Tillage plots to include long time fertilizer work.

G. General Farming Operations. All farming operations are under the direct supervision of the Station Agronomist. All tillage methods and cropping practices followed are those which our Crop Rotation and Tillage Trials have proven to be the best for the area. Varieties used in our farming operations are always those varieties which our trials have proven to be the best for this region. In our general farm work, as in all other phases of work at the Dickinson Experiment Station, we try to do a model job so that the farmers who see that we "practice what we preach" and make it work will have greater confidence in what we are doing.

H. Feed Supply: Our feed supply on hand on the basis of the present values is worth $29,300 and includes the following:

1,200 ton of silage @ $10.00	$12,000.00
350 ton of hay @ $20.00	7,000.00
6,000 bu. of oats @ $.80	4,800.00
2,500 bu. of barley @ $1.00	2,500.00
2,000 bu. of corn @ $1.50	3,000.00

WIND DAMAGE at the DICKINSON EXPERIMENT STATION

Property Damaged	Insurance Collected
Corn Crib - Total loss	$125.00

NEW EQUIPMENT AND MACHINERY PURCHASED IN 1953

PERMANENT IMPROVEMENTS:

- Bathroom fixtures and furnishings (Mess House).
- Bathroom fixtures (Superintendent's Residence).
- Explosion proof (safety) disconnect switch - 5 HP.
- 175 Colorado Blue Spruce.
- Electric waterers (cattle lots).
- 576 Cedar Posts for fences.
- Sink.

MACHINERY:

- Lawn mower.
- Grain auger.

OTHER EQUIPMENT SECURED:

- 2 - 14" x 22" Cardboard Letter wood panels.

- Hog troughs.
- Model 300 Soil Moisture Ohmmeter.
- Single Swivel Teejet Nozzle.
- Second hand stove.
- Two granary jacks.
- One bumper jack.
- Stone's Revolving Head Tattoo Market with complete alphabet.
- One Electric Brander.
- 100 sets tags and neck chains.
- Ear notcher for pigs.
- One Electric Dehorner.
- One Mechanic's Creeper.

OFFICE EQUIPMENT:

- "Origin of Cultivated Plants" by N. I. Vavilov.
- State Weed Board Publication No. 5 - "South Dakota Weeds".
- Morrison's "Feed and Feedings".

LIVESTOCK:

- One team horses (one died).
- One purebred Yorkshire gilt.
- 500 baby chicks.
- Two Duroc Jersey boars.

GENERAL SUMMARY

The following is a summary of my official contacts and activities at the Dickinson Experiment Station from November

1, 1952 to October 31, 1953.

Tours are handled by all of the members of our staff.

Number of News Articles	16
Number of Radio Talks	16
Number of Station Calls	115
Number of Farm Visits	40
Number of Meetings Attended	35
Number of People Attending Meetings	3309
Number of Tours	17
Number of People Attending Tours	1679

MEETINGS AND TOURS

In all of our contacts an effort is made to acquaint people with the Dickinson Experiment Station as a part of the North Dakota Agricultural College. The following is a list of meetings attended and tours conducted between November 1, 1952 and October 31, 1953.

Date	Meeting	Attendance
November 3	Soil Conservation Recognition Banquet, Rhame	100
November 16	Finance West River Show	Several hundred

November 6	West River Show	
November 17	Mr. Arnason & Mr. Lueck visited Station	
December 5	Livestock Research Roundup	800
December 15	Oliver Co. Livestock Breeders Ass'n.	60
December 16	West River Fair Board Meeting	6
December 30	West River Fair Board Meeting	7
January 7	Taylor	52
January 8-16	Annual Expt. Station Conference, Fargo	
January 24	Fairview Sheep & Cattle Feeders Tour	201
February 16, 18	Dickinson State Teachers College	32
February 10	Zap Farm Institute	100
February 11	Hazen Farm Institute	140
February 12	Hebron Farm Institute	125
February 13	Wing Farm Institute	125
February 19	New England Farm Institute	450
March 3-5	Valley City Winter Show	
March 26	Stark County Commissioners Board Meeting	
March 2, 6	Dickinson State Teachers College	32
March 31	Agricultural Class DSTC Tour of Livestock Farm	12

April 2	DSTC Class Tour of Station	26
April 2	DSTC Class	35
April 8	General Meeting, New England	75
May 16	4-H Club tour - Antelope	35
May 22	Agriculture Committee Meeting	11
May 4	Grade School Tour	7
June 2	DSTC Tour	40
June 4	Stockmen's Convention, Mandan	200
June 10	Tour - Kidder County Agent's Group	25
June 17	Agriculture Committee Meeting at Chamber of Commerce	9
June 23	Lions - Tour of Experiment Station	70
June 27	Old Settlers Picnic, Amidon	500
June 28	Kidder County Breeders Association Meeting, Steele	80
June 30	Little Missouri Grazing Association, Amidon	35
July 1	Dean Walster Day	500
July 10	4-H Club of Wibaux, Montana, tour	22
July 10	Great Northern Tour	4
July 15	Father Wormland's visit	

July 15	Rotary Meeting and Tour	35
July 16	F.H.A. tour	10
July 17	DSTC Conservation Class	60
July 28	Hettinger Field Day	36
September 11	Golden Valley County Fair	150
September 18	Bowman County Fair	150
September 24	Soil Conservation Service Tour of Station	40
October 6	Central Public School 4th Grade	40
October 23	4-H Roundup at Mott	100
October 23	Center and Stanton Veterans Training Group Tour of Station	25

NEWS RELEASES

Date	Title	Author
November 6	Barley Variety Trials at the Dickinson Experiment Station in 1952	Thomas J. Conlon
November 12	Canadian Veterinarian to Speak at the Livestock Research Roundup	Raymond J. Douglas
November 13	Prominent Livestock Man to Attend Livestock Research Roundup	Raymond J. Douglas

November 20	Native Grass Needs Spring Moisture	Warren C. Whitman
November 26	Livestock Research Roundup	Raymond J. Douglas
November 27	Calves May Make More Money When Wintered on Low Level Rations	Larkin H. Languor
December 1	Livestock Research Roundup	Raymond J. Douglas
December 4	Livestock Research Roundup	Raymond J. Douglas
December 11	Tegal Barley Good Yielded at Dickinson	Thomas J. Conlon
December 18	Heavy Grazing Increases Sagebrush	Warren C. Whitman
December 25	Try to Avoid That "Winter Pause" in Egg Production	Larkin H. Languor
January 1	Variety Picture Unchanged for Western North Dakota for 1953	Thomas J. Conlon
January 8	The Value of Corn in the West River Area	Raymond J. Douglas
January 15	Grass Hays More Leafy in Dry Years	Warren C. Whitman
January 22	Cattle Show Appreciation for Mild Winter Weather for Western North Dakota	Larkin H. Languor
January 29	Treatment of Infectious Contagious Diseases	Raymond J. Douglas
February 5	Flax Varieties for Western North Dalota	Thomas J. Conlon
February 12	Increase Grazing Capacity with Crested Wheatgrass	Warren C. Whitman
February 19	Cut Wintering Costs by Feeding Carefully	Larkin H. Languor
February 26	Corn Silage Makes Beef	Raymond J. Douglas
March 5	Use Alfalfa with Crested Wheatgrass for Pasture	Warren C. Whitman

March 12	Disked Small Grain Stubble for Wheat Production	Raymond J. Douglas
March 19	Baby Chick Time Again	Larkin H. Languor
March 26	Order Your Evergreens Early	Thomas J. Conlon
April 2	Most Critical Time of Hog Raising	Raymond J. Douglas
April 9	Corn Ground Provides Good Seedbed for Grasses	Warren C. Whitman
April 16	Steer Feeding Trial Completed	Larkin H. Langford
April 23	New Grains in Dickinson Experiment Station Variety Trials	Thomas J. Conlon
April 30	Begin Fallow About May 15	Raymond J. Douglas
May 7	New Grasses and Legumes at the Dickinson Station	Warren C. Whitman
May 14	Experimental Cattle Have a Good Winter	Larkin H. Langford
May 21	Plan Your War on Weeds Now	Thomas J. Conlon
May 28	Visit the Dickinson Experiment Station on July 1	Raymond J. Douglas
June 4	Dean Walster Day	Raymond J. Douglas
June 4	Tame Grasses - High Yielders This Year	Warren C. Whitman
June 8	Be Sure and Visit Dickinson Experiment Station on July 1	Raymond J. Douglas
June 8	Summer Pasture Trials With Pigs are Started	Larkin H. Langford
June 18	Women to be Special Guests of Dickinson Experiment Station July 1	Raymond J. Douglas
June 18	Ladies Program features Model Garden at Dickinson Experiment Station Field Day	Thomas J. Conlon

June 25	Walster to be Honored July 1	Raymond J. Douglas
July 2	Grass Still Benefits from 1951 Fertilizer Treatment	Warren C. Whitman
July 9	Fryers Finish Early This Year	Larkin H. Languor
July 16	Good Weed Kill in 1953	Thomas J. Conlon
July 23	Watch Your Evergreens for Red Spider	Raymond J. Douglas
July 30	Alfalfa Varieties Produce High Yields at First Cutting	Warren C. Whitman
August 6	Self-Fed Pigs on Pasture Gain Well	Larkin H. Languor
August 13	Corn Crop Prospect Improving	Thomas J. Conlon
August 20	Fall Pigs Pay	Raymond J. Douglas
August 27	Fertilizer Most Effective in Grass Renovation Trials	Warren C. Whitman
September 3	Time to Move Pullets to Laying House	Larkin H. Languor
September 10	Wheat on Cornland Yields Well in 1953 at Dickinson Experiment Station	Thomas J. Conlon
September 17	Dickinson Experiment Station Three Year Rotations Yield Good	Raymond J. Douglas
September 24	Native Grass Production Outstanding This Year	Warren C. Whitman
October 1	Experimental Cattle Will be Fat This Fall	Larkin H. Languor
October 8	Durum Wheat Badly Hurt in 1953	Thomas J. Conlon
October 15	New Seedings for Pasture Trials at the Dickinson Station	Warren C. Whitman
October 22	Livestock Research Roundup	Raymond J. Douglas

October 29	Pig Pasture Trials for 1953 at the Dickinson Experiment Station	Larkin H. Languor

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