HOG CHOLERA SERUM CLUBS SUCCESSFUL

Provide a Sure and Economic Means of Protection Against Hog Cholera,
Says County Agent

(By J. M. Browning)

A number of hog cholera serum clubs have been organized in Marshall county and have proved successful in every way. Hog cholera was sweeping the country and after trying several different plans of combating the disease, the club plan was attempted. The main object of these clubs was to provide means whereby a certain quantity of hog cholera serum could be kept on hand in each community, ready for use when needed, at a comparatively low cost.

The first club was formed at Newark. At a meeting called for the discussion of methods for the prevention and control of hog cholera in hogs, the matter of keeping a supply of serum on hand was brought up. No one man cared to make the whole investment by himself, so we hit upon the plan of forming a club and charging $2 dues per member, the total dues to be invested in serum and kept by a designated member of the club. This officer was instucted in the proper way serum should be kept. Then, having serum on hand, when a member wanted to vaccinate his hogs he would go to this officer and get what serum he wanted, paying for it at actual cost. This money was again invested in serum and so on. Thus for $2 a farmer was guaranteed hog cholera protection, being able to get the serum when it was needed.

By this plan we have saved a great number of hogs that would have died had we had to wait for serum to be shipped in. This plan is working fine in this county, and these clubs are, you will find, fairly easy to organize and they provide a sure and economic means of hog cholera protection.

Laura E. Jones will be the Home Extension Agent in the district consisting of Clark, Codington, Hamlin, and Deuel counties. Miss Jones is a graduate of Iowa State College and was formerly a Home Demonstration Agent in South Dakota. We are glad to welcome Laura E. back to the fold.

A RATTLING FORD AND A ROCKY WAY

No use talking, I should be twins
Takes two to finish what one begins,
   Got a dozen things
   To do today,
   With a rattling ford
   And a rocky way.

Hoppers are after the River oats.
Some poison mash will get their goats.
I ought to go out there to-day.
To mix that bran and show the way.

Dr. Weaver and County Agent Hamilton conducting a post mortem examination in Minnehaha county.

BROOKINGS, SOUTH DAKOTA

HOLD DEMONSTRATIONS OF HOG VACCINATION

Which Show Farmer That the Operation Is Too Difficult for Untrained Hands

(By Dr. G. S. Weaver)

During this year considerable agitation has been carried on over the state of South Dakota, by farmers and others, asking for information and hog cholera schools with the idea that they might be permitted to vaccinate their own hogs. Several of the County Agents were requested to teach farmers to vaccinate hogs and hold vaccination demonstrations as well. Inasmuch as the agents felt that this was not strictly educational work, and a little out of line, the specialist was called upon to carry on demonstrations.

The idea of the vaccination demonstration was to teach the farmer that the operation was entirely too difficult for untrained hands and not to teach him to do the work himself.

One County Agent put on a few demonstrations and after doing this felt that each farmer in the neighborhood wanted a demonstration on his farm. He later turned the work over to the local veterinarian and did not vaccinate any more hogs.

Brookings county carried on more demonstrations than any other county. D. C. Jones, of Kingsbury County, called the veterinarians and representative farmers together on the morning of June 5 and the vaccination situation was discussed. The idea of the meeting was to get more cooperation between the farmers and veterinarians, also to give each a better understanding of the County Agent's duties in regard to the hog cholera work. The veterinarians and farmers had a chance to give their ideas on the proposition. The farmers seemed to think that the veterinarians were charging too much. Some of the veterinarians stated that the farmers did not pay so it made no difference what the charge was. After considerable argument from both sides, the veterinarians agreed to make a standard price of two cents a cc., which included the injection of the serum. Five vaccination demonstrations were put on by the specialist. Mr. Jones feels that the demonstrations have greatly assisted him.

(Continued on page two)
JONES COUNTY STRESSED BLACKLEG CONTROL WORK

(By W. P. Gamble)

Losing cattle from blackleg had come to be an expected event on many Jones County farms two years ago, and it was a common occurrence, in the fall during blackleg season, for a farmer to come into the County Agent's office and request some Government vaccine, and state that he had lost two or three head the night before.

This fact led to the adoption, by the board of directors of the County Farm Bureau, of a blackleg control campaign as a major project for 1921. As a basis for the campaign a questionnaire was sent to each farmer in the county by the County Agent asking the size of herd, the losses sustained from blackleg, the method of control used, and if vaccinated the kind and how often done.

Returns from this letter indicated a loss of about 40 head during the year. The outstanding fact brought out by the letter, however, was that herds that were protected by some form of germ free vaccine sustained no losses in any case. All other means of protection, although evidently if proper methods of vaccinating were demonstrated, and adopted generally, this large loss could be practically all controlled. Several large breeders and ranchmen wrote that they sustained losses each year until beginning the use of germ free vaccines. C. T. Bates of Stamford, A. D. Lowe of Van Metre, Martin Johnson of Draper, and E. B. Townsend of Murdo were among the larger cattlemen who had this experience.

The campaign was based upon the above information. Newspapers of the county very kindly gave all the space requested for giving publicity to the campaign, and merchants who were handling blackleg vaccine gave their advertising space for the same purpose.

The campaign was conducted by selecting farmers who had sustained losses especially in their ranch community to cooperate in carrying out the project in their respective communities. Demonstration meetings were arranged through these men in all parts of the county. At each meeting the County Agent outlined the reasons for conducting the campaign, gave the figures on losses in the county, briefly discussed the nature of the disease, methods of control, and demonstrated the vaccinating process on the herd, always using a herd where losses had occurred that year. Dr. Weaver spent a week in the county cooperating on the project.

It is now nearly a year since these demonstrations were conducted and in no case has there been a loss from blackleg in a demonstration herd. Further, quite a number of requests for information or demonstration on the methods recommended during the campaign have been received this year from farmers who did not see a demonstration last year, indicating that the effect of the campaign is spreading.

No definite records of the total effect of the campaign have been obtained, but it is probably conservative to say that one half the losses of two years ago have been checked. The control work will go on, however, until the other half is stopped. One year's campaign in any project seldom reaches all of the farms it can benefit.

For this year continued work on the project includes demonstrations where requested, and the use of a few slides made up from local pictures at community meetings this coming winter and with them a brief statement relative to the control work and methods.

HOLD DEMONSTRATIONS OF HOG VACCINATION

(Continued from page one)

in the way of keeping out of the serum business.

The veterinarians of Brookings County cooperated in holding the demonstrations with Mr. Boyts. They attended and assisted in the various meetings. A lecture was given on "Hog Cholera and Allied Diseases" at eight different farms. At one meeting a farmer from Iowa got up and stated, without solicitation, that he had attended a hog cholera school in Iowa but did not intend to vaccinate his own hogs. After attending this school he soon learned that it was the work of the veterinarian and not the farmer. At one meeting a number of farmers came with the sole purpose of learning how to vaccinate and they went away with the idea of pooling orders for serum and contracting with the veterinarian to do the work. Mr. Boyts reports that all hogs vaccinated are doing well and thinks that the demonstrations were well worth while.
WHICH MAN IS RIGHT?
(By Dr. C. C. Lippard)

Two of Mr. A’s calves suddenly became sick. He called the local veterinarian, but a positive diagnosis could not be made. The calves died and again the local veterinarian was called to make a post-mortem examination. The evidence was not conclusive, and fearing the disease might be infectious and wishing to protect his other calves, as well as his neighbors, it was decided to enlist the services of the Animal Health Laboratory of State College. Accordingly, a sample of blood was sent in for examination.

This blood was secured immediately after the death of the first calf. The bottle in which it was shipped was large enough to hold a teaspoonful. It was clean, well-corked, securely packed in absorbent material, and then wrapped and plainly addressed. The name and address of the person sending the blood sample was sent in for examination, and the package was received in the laboratory, without delay, and many bacteria were found that presented all the microscopic characteristics of those causing hemorrhagic septicemia. This information together with that contained in the letter led to a diagnosis of hemorrhagic septicemia. The result was that the local veterinarian was then in position to advise the proper measures to prevent the further spread of the disease. This information was furnished promptly and without cost and was highly satisfactory to all concerned.

Mr. B. also lost three yearling steers. He attributed the cause of death to poisonous plants in the pasture and paid no further attention to it at that time. One week later four more steers were found dead in another pasture. Mr. B. did not call a veterinarian but decided to hold a post-mortem examination himself. This yielded no information whatever because he was not trained to look for evidence of disease, and had he found abnormal conditions he would have been unable to interpret them. Mr. B. then decided to have a sample of blood examined in the Animal Health Laboratory of State College because he had been told of the service Mr. A. received. A sample of blood was secured 18 hours after the steer died. An empty catsup bottle was used. It was rinsed with cold water, but not washed, consequently it was not clean. When the catsup was opened, the cork had been pushed into the bottle, and since no cork was available, a roll of paper was used for a stopper. The bottle was wrapped in a newspaper. No absorbent packing material was used as required by the United States postal regulations.

The package was finally reached the Animal Health Laboratory, most of the blood having leaked through the paper cork into the wrapper. The wrapper did not contain Mr. B’s name and address, and three days after the package was received in the laboratory, a letter from Mr. B. was received which demanded an immediate examination of the blood. No other information was contained in the letter. Bacteria resembling those causing hemorrhagic septicemia were found in this blood also, but a diagnosis was not made, because the blood was not in suitable condition for examination, and no other information was available, nor even a statement of the species of animal from which it was secured. When the letter Mr. B. received stated that no diagnosis could be made because sufficient information was not available, he was disappointed and expressed his displeasure in the reply he immediately wrote. His young cattle continued to die, the loss amounting to 17 head. He had no faith in a laboratory diagnosis, and has lost what little faith he once had in State College.

Both cases described above are typical of two types with which the Animal Health Laboratory of State College deals almost every day. One received the service he had a right to expect. The other did not receive the service he expected, for obvious reasons. He does not believe in State College and is doing all in his power to hinder its service and the development of the State. Which man is right?

CLEANING UP SCABIES
IN DEWEY AND CORSON
(By Oscar A. Hermstad)

During January, 1919, reports came to the office that certain cattle were bothered with some kind of infection in the skin and I was asked to look into the matter. From appearances it seemed to be scabies, but to make sure I wired the Livestock Sanitary Board at Pierre, and in a few days Dr. Niederour came to make a thorough investigation.

In the following two weeks we covered the north half of Dewey and the south half of Corson counties and found scabies quite general, though the infection seemed to trace back to a shipment of cattle which had been received by a local bank in July, 1918, from Roswell, N. Mex. All herds infected or exposed were quarantined and ordered dipped as soon as weather conditions would permit and vats could be constructed.

The County Commissioners of both Dewey and Corson counties were met with and the situation explained, after which they ordered vats to be built in different parts of both counties. The work of building these vats was placed in my charge as at that time I was trying to serve Dewey County and the south half of Corson county.

This meant considerable hustling, nights, days, and Sundays—but the vats were constructed in time to dip quite a large percentage of the infected cattle outside of the reservation where the Bureau of Animal Industry had taken charge. If this dipping had not been done during the summer of 1919, a county quarantine would have been placed on Dewey and the south half of Corson which would have been a real hardship on the stockmen owing to the shortage of hay that year.

During the summer of 1920 all of the infected and exposed cattle in the two counties were dipped though not without some arguments, many of the stockmen claiming it to be quite work. A movement was started by the bank that shipped in the cattle to have the commissioners discontinue the appropriation for County Agent work and to discontinue the services of the present County Agent, but this movement only lost the effect of making the work stronger.

One big obstacle in cleaning up the scab was the dependent Indian, but after conferences with the superintendents of the Cheyenne and Standing Rock Agencies, they did all they could in building vats and forcing the dipping of infected and exposed stock.

My annual report of December 1, 1920, shows 56,000 cattle dipped, 50 percent infected and 40 percent exposed, making a savings of $418,000.

A large percentage of the cattle dipped belonged to large cattle companies, the “D. Z.”, and the “Diamond A”, which cooperated very well, though they came under the supervision of the Bureau of Animal Industry as did the dependent Indian, being on reservation lands.

In summing up I might say that the small stockman was the hardest to convince until he was shown what scabies would do, and many times I had to take him over to infected herds and show him the scab mite at work.

Our commissioners showed a hearty cooperation, also the Indian Department, as well as the Bureau of Animal Industry and the Livestock Board.

Definition of a County Agent or Extension Worker—A successful County Agent or Extension Worker is a man with sunshine in his face, facts on his finger tips, steam in his shoes, and steel in his backbone. With this he develops a crowbar of convincing conversation by means of which he can pry pessimistic plodders out of the path of progress. Contributed by U. S. Ebner.
SOUTH DAKOTA EXTENSION REVIEW, BROOKINGS

HIGH SPOTS

Chas. J. Gilbert—Community Organization: The large community meetings held recently were attended by clubs in arranging for speaker. County completely circulated with bills. Grain grading schools scheduled and arranged publicity as follows:

Circular letter to all farmers' elevator managers, all farmers' elevator presidents, all farmers' elevator board members, all farmers' elevator shareholders, all bankers, all real estate agents. Also items in newspapers and general circular to all farmers.

Lewis M. Woodruff—Cooperative Shipping: The shipping association having gone to pieces somewhat, a campaign to revive it was carried on. At a special meeting of officers and interested men a new manager was secured who took the work under a different system. He has established connections with the packer market as well as with Iowa feeders, coast shippers, and commission houses. Men are being encouraged to keep the manager informed of grades and classes of stock and cooperate in filling orders for any special kind. The association is on its feet again, is shipping regularly and prospects are good. Community clubs are still holding regular meetings through the busy time. One club purchased in bulk the minerals used in the hog tonic recommended by the college and distributed the mixed powders among the members. The order was handled through the local druggist. Many of the purchasers have not used these minerals regularly and it is felt that they would not have bought them if this pooled order had not been made up.

A. W. Tompkins—Potato Improvement: Hamlin County has 28 potato growers who have entered fields comprising 296 acres in the potato seed certification project. The first visit to the field was made on June 17 with Dr. Arthur T. Evans of the agronomy department of State College. According to a report from the secretary-treasurer of the South Dakota Potato Growers Association there are 131 growers in 13 counties who have entered fields for certification of seed potatoes, comprising 650 acres. With 296 acres in this county the conclusion can be drawn, in view of the fact that potato seed certification was started in 1919 here as a long term project, that it is one of real value and benefit.

J. M. Browning—Farm Bureau Tour: On the morning of July 14, 25 farmers left Britton for a tour of the county via Newark, Kidder, Veblin, Hillhead, Lake City, Eden, Ft. Sisseton and return to Britton. The entire day was consumed by this trip, many farmers being too busy to look at the unique things that different farmers were doing to raise better crops and livestock.

Deane G. Davis—C. G. Worsham, assistant to the Commissioner of Agriculture, was with the agent nearly five days making a cost production survey on feeder cattle, alfalfa, seed and sheep. Ten records were taken. This work helped the agent to clear up some of the problems in his own mind about the cattle business, its possibilities and limitations. Five of the farmers have started to keep accounts as a result of this survey. Mr. Worsham also rendered valuable assistance for one day at the annual stockholders meeting of the Marketing Association by indelibly impressing on the minds of the directors their responsibility, the need of exacting a monthly statement from their manager, and then analyzing that statement.

C. D. Sayler—Acme Wheat Demonstration: Three of the five fields of Acme wheat were inspected for rust and representative samples taken. Reports from the other two confirmed the other inspections. Bundles of 20 heads each of the Acme, the common durum and the Marquis were placed in conspicuous windows in the towns with typewritten posters calling attention to the rust resistance of the Acme and the black stem rust that was present on the other two.

The community clubs are still holding regular meetings through the busy time. One club purchased in bulk the minerals used in the hog tonic recommended by the college and distributed the mixed powders among the members. The order was handled through the local druggist. Many of the purchasers have not used these minerals regularly and it is felt that they would not have bought them if this pooled order had not been made up.

E. H. Aicher—Hog Houses: Twelve farmers interested in hog house buildings attended a demonstration and tour by Ralph L. Patty. One house was laid off and suggestions offered in connection with the ventilation, light, and foundations of three others. It is anticipated that three building demonstrations of an approved type will result from Mr. Patty's visit.

A. D. Ellison—Grasshopper: During the month of July there were 12 community mixing demonstrations held with a total attendance of 112, at which time there were about 50,000 pounds of grasshopper bait prepared and distributed. The material used in the poisoned bait is furnished by the county to the farmer at cost. This method has proved satisfactory and has made a considerable saving to farmers using grasshopper bait.

O. M. Osborne—Field Tours: On July 24, 17 men, in company with the County Agent, made a field tour to the different alfalfa demonstration fields, as well as to other alfalfa fields, and to a sunflower demonstration. The quality and size of the alfalfa thoroughly demonstrated that Corson County can grow alfalfa. The row method, on the whole seemed to yield the most satisfactory results. The sunflower had yielded to date fully three times as much forage as the corn planted beside it. The sunflower, however, had reached the silage stage.

A. M. Eberle—Army Worm: Army worms were found in very large numbers at Lodgepole and Lemmon. By starting in time, putting out poison and plowing trenches, very little damage was done. One-half ton of poison was spread to check their advance. Also examinations and instructions for the spraying of trees for the tree beetle were given.

A. W. Palm—Horticulture: These days are telling the story of the value of "to spray or not to spray." Found an outbreak of oyster shell scale and have agreed to help start control of it by an early dormant spray next spring.

Evan W. Hall—Stock Pig Tour: A trip to seven farms in Lawrence County with a party of farmers was made on July 26. Mr. Bober, hogman for Newell experiment station, was with the party and talked about the pigs and methods of handling them at each farm. The mistakes as well as the successes were pointed out and every farmer who made the trip said that he was well paid for the time given to the trip. Alfalfa pasture and its use with grain in developing stock and serum pigs was the principal feature of the trip. Demonstrations in the use of alfalfa pasture and a grain supplement were also visited.

W. C. Boardman—Tuberculosis: During the month work on the tuberculosis campaign consisted of gathering data. Arrangements with W. A. Peck, livestock commissioner, South St. Paul, were made for special postmortems of car lot shipments of hogs from different parts of the county. So far we have the following results:

- Curemont: 101 hogs: 28 infected 28.0%
- Frederick: 105 hogs: 16 infected 15.2%
- James: 49 hogs: 36 infected 73.4%

When contagious diseases are suspected, county agents or farmers themselves send specimens to the Animal Health Laboratory at State College for free examination and diagnosis.