

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

A41
R31

UNITED STATES
DEPARTMENT OF AGRICULTURE
LIBRARY



BOOK NUMBER

A41
R31

871523

A REVIEW OF THE STATES' BRUCELLOSIS PROGRAMS

By A. K. Kuttler, D. V. M.¹

Presented at the National Brucellosis Committee
Annual Meeting, Chicago, Illinois, May 13, 1954

At the Annual Meeting of the National Brucellosis Committee last year an attempt was made to report orally to the Committee on some of the more important details of the brucellosis eradication project in each of the States. This year, the following report for each of the States and tabulated information has been cleared with State and Federal co-operating officials, and should enable the Committee to evaluate progress being made.

ALABAMA

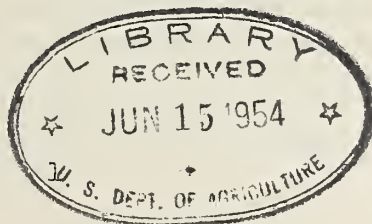
Funds expended for brucellosis eradication during 1953: State, \$90,000
Federal 44,020.25

Percentage cows tested - 6.4

Percentage total heifer calves vaccinated - 17

The Alabama program is essentially a calf vaccination effort, with services within a county becoming compulsory when the area has been designated by the State Veterinarian. Vaccine and veterinary services are supplied by the State within the limit of funds. Technicians may be employed by the authorized veterinarian to vaccinate under his supervision. It is estimated that about 50 percent of animals retained for breeding purposes are being vaccinated as calves. Not more than 5 percent of the breeding stock are under test and further expansion of either phase of the program cannot be expected without additional funds. The milk test is not being used, as follow-up blood testing would not be possible. It is considered likely that most county and municipal health units will have adopted the U. S. Milk Ordinance and Code by 1955, which will require considerable program expansion. Efforts are under way by interested agricultural groups to obtain industry support for improved laws and financial support from the 1955 session of the Legislature.

¹/ Dr. A. K. Kuttler, Animal Disease Eradication Branch, Agricultural Research Service, United States Department of Agriculture.



ARIZONA

Funds expended for brucellosis eradication during 1953: State, \$24,448.23
Federal 25,017.49

Percentage cows tested - 44.67

Percentage total heifer calves vaccinated - 83.73

As in most of the States, Arizona livestock sanitary officials hope to improve in a few minor details the present brucellosis laws. There are no provisions for area brucellosis eradication work in the present brucellosis law. However, in the main, the Arizona brucellosis eradication project is progressing satisfactorily.

An interest on the part of all concerned continues to improve. The main emphasis is placed on dairy cattle. Calf vaccination in all except negative dairy herds is compulsory. The cost for vaccine is borne by the owner. All other expense, except for handling the cattle, is borne by the State. There is little evidence at the present time to justify calf vaccination in ranch herds.

Beef cattle growers in two of Arizona's counties located in range areas, (Navajo and Apache Counties), have shown increasing interest in having their beef cattle tested with the view of certifying these areas.

ARKANSAS

Funds expended for brucellosis eradication during 1953: State, \$49,314.
Federal 126,023.80

Percentage cows tested - 4.3

Percentage total heifer calves vaccinated - 65.8

The program in Arkansas has for the last four years stressed voluntary calf vaccination, with blood testing upon request, as the basic control procedures. Vaccination is performed largely by trained State and Federal technicians working under veterinary supervision with vaccine and all services provided without expense to the owner. It is recognized by the cooperating sanitary officials and agricultural agencies that this program is not the answer to eradication of the disease, but there is agreement that it is satisfying the present needs of the livestock industry and building favorable sentiment for future area testing and eradication practices. A complete test of several counties as evaluation of the program to date is planned within the near future.

CALIFORNIA

Funds expended for brucellosis eradication during 1953: State, \$470,602.24
Federal, 35,704.74

Percentage cows tested - No testing program

Percentage total heifer calves vaccinated - 90

California is unique in several respects. No indemnity has ever been paid for reactors slaughtered on account of being affected with brucellosis. The State was late as compared to others in getting a Statewide program in effect. Ample field and laboratory research, as well as careful consideration on the part of a large State Brucellosis Committee, was made before adopting a calf vaccination program, which has served the best interests of the industry and consuming public.

Calf vaccination is compulsory for female dairy calves and voluntary in beef herds. It is estimated that 90 percent of the dairy calves, and 75 percent of the beef calves are now being vaccinated. There has been an increase in the number of calves vaccinated each year, after the project was begun on a Statewide basis in 1948. Practically all vaccination is done by practicing veterinarians, who are paid 75¢ per head.

California has adopted a brucellosis regulation which will become effective in 1956. This regulation prohibits movement of dairy cattle over four months of age into California, except for immediate slaughter, unless they are negative to the test for brucellosis or can be certified as having been officially vaccinated between the ages of four and twelve months. Any State movements will be governed by a similar regulation.

At the request of dairymen in the Los Angeles Milk Shed, where approximately 50,000 cows are imported annually, a regulation has been adopted for Statewide adult vaccination of negative cattle over 12 months of age in a voluntary program.

COLORADO

Funds expended for brucellosis eradication during 1953: State \$11,812.
Federal 73,500

Percentage cows tested - 12.6

Percentage total heifer calves vaccinated - 16.3

A campaigning public health official, as well as State and Federal Livestock Sanitary Officials, and others interested in the brucellosis eradication project, contributed a good deal to the establishment of an active brucellosis eradication program in dairy herds several years ago. Calf vaccination is compulsory in dairy and voluntary in beef herds. All dairy herds are required to test annually, and the regulations provide that all dairy herds shall adopt Plan A no later than January 1, 1956. Beef and range operators have been cooperative; however, all work pertaining to these herds is voluntary. This situation has prevented certifying a number of counties which have been operating on an area basis for several years.

The law provides for the identification of reactors. However, by Department regulation, the branding is not mandatory until the cattle are moved from the farm or ranch. This procedure is expensive, and owners do not always comply with this law. The project is not well financed, and some difficulty has been encountered recently on this account. Work done in areas under supervision of Federal employees is without cost to the owner, except for handling his cattle, and furnishing vaccine. For work done in other areas the owner pays for services rendered.

CONNECTICUT

Funds expended for brucellosis eradication during 1953: State, \$73,350
Federal, 4,406

Percentage cows tested - 14

Percentage total heifer calves vaccinated - 95

The State law requires that all calves be vaccinated at State expense.

Area brucellosis work is not carried on in Connecticut.

Reactors to informative tests may be retained on farms without branding until sold for slaughter, unless the milk from such animals is sold raw.

DELAWARE

Funds expended for brucellosis eradication during 1953: State, \$35,000
Federal, 18,744.85

Percentage cows tested - 35

Percentage total heifer calves vaccinated - 55

All dairy companies in Delaware except one, a condensary, have required their patrons to sign up under Plan A and to be operating under this plan by 1955.

The milk ring test has been used extensively during the past year with a follow-up blood test in suspicious herds. Excellent progress is being made.

Since July 1, 1953 a law has been in effect prohibiting the movement of animals for dairy or breeding purposes without a 30-day negative test unless they are from a certified herd or were properly vaccinated as calves.

FLORIDA

Funds expended for brucellosis eradication during 1953: State, \$52,220
Federal, 94,781.43

Percentage cows tested - 15.5

Percentage total heifer calves vaccinated - 20.9

The Florida program has for several years stressed calf and adult vaccination as the most practical approach to its eradication program. Because of the large number of dairy importations which have been necessary in the past, vaccination of the additions upon entry into the herd has been very generally practiced and with very satisfactory clinical results. Calf vaccination is consistently followed in these herds and many have become brucellosis-free through gradual replacement with home-grown vaccinated heifers and the discontinued need for outside replacements. The work is conducted sporadically. Vaccine is furnished by the State, and all services are without expense to the owner as far as State and Federal personnel are available. There is a gradual transition to calf vaccination only in many herds, and a proportionate drop in the need for adult vaccination. The added value of home-grown vaccinated

replacements is being demonstrated and accepted as a profitable practice both production-wise and disease-wise, and is reflected in the increasing number of certified herds. The choice of the procedures now in effect in Florida has provided for a stable industry under the conditions peculiar to that State, while advancing toward a program of eradication which can be adopted without undue disruption to the producing industry.

GEORGIA

Funds expended for brucellosis eradication during 1953: State, \$67,180.36
Federal, 40,197.08

Percentage cows tested - 19.6

Percentage total heifer calves vaccinated - 5.1

The brucellosis program in Georgia, following several years of area work under full-time personnel, follows at present a voluntary individual herd pattern with provision for area operations upon request of the county officials and with their participation. Most of the work at the farm level is now conducted by practitioners under a State fee schedule which covers vaccination and testing services, but which requires owner payment for the vaccine. Augmenting this, A.R.S. veterinarians supply service in areas and herds where practitioners are not available. In addition, Georgia law requires that cattle passing through livestock sales establishments for other than slaughter be tested for brucellosis with reactors released for slaughter only.

While all areas formerly certified under the original program have lost their status, it is believed the current program under the general supervision of full-time area veterinarians is building an understanding which will provide a stronger basis for area eradication. There is good support for the present policies and personnel associated with the program are enthusiastic about its future.

IDAHO

Funds expended for brucellosis eradication during 1953: State, \$110,330.44
Federal, 51,592.95

Percentage cows tested - 6.1

Percentage total heifer calves vaccinated - 69.

Idaho has had a very good brucellosis eradication program since its inception. The principle limitations are funds and personnel. At one time there was considerable disagreement between dairy and range interests. This situation has been resolved to a considerable extent, as a result of confidence on the part of all livestock owners as they have observed the progress being made under present procedures.

An outstanding feature of the Idaho program has been acceptance by the industry of a direct tax on livestock to provide funds for administering the State share of the program. This has the advantage of creating interest on the part of each tax payer. The tax item appears on the tax statement as a livestock disease control tax, and most owners are desirous of obtaining service for which they pay.

Calf vaccination has been a major effort in Idaho for a number of years. Most herd owners are in a much better position to finish the brucellosis eradication project than when the test and slaughter program was inaugurated in 1934.

ILLINOIS

Funds expended for brucellosis eradication during 1953: State, \$507,034
Federal, 95,633.67

Percentage cows tested - 24.2
Percentage total heifer calves vaccinated -16.4

Illinois has been among the leaders in contributing to the brucellosis eradication project in both the State and Nation since 1942. You will recall I reported last year on the Jersey County, Illinois project which was a straight calf vaccination program. We have had no occasion to modify the optimistic report made at that time. The same type check-up is now being run in areas in New York and California where calf vaccination has been followed for about the same length of time as that in Jersey County. Those who are making this study hope to be able to make a report at the next annual meeting of the United States Livestock Sanitary Association.

Illinois does not have a State Brucellosis Committee, but an Advisory Council to the Director of Agriculture, consisting of representatives from the Illinois Agricultural Association, Public Health Department, Illinois Veterinary Medical Association, Purebred Breeders' Associations, University of Illinois College of Veterinary Medicine and others, who have encouraged an excellent educational and legislative program. The State should be ready to comply with the law which provides that all Grade A dairy herds must be under an official program by 1955, and all dairy and breeding herds in the State must be under a Plan by July 1957. Calf vaccination has been widely used in Illinois, and most herds are in such condition that it will be possible to eliminate the remaining infected animals without too much of a shock to the producers. The milk test has been used extensively and all phases of the program have been made available to the owner without cost to him except for handling of his cattle.

Illinois is one of the few States where a swine brucellosis eradication program has been adopted.

INDIANA

Funds expended for brucellosis eradication during 1953: State, \$150,000
Federal, 26,688.90

Percentage cows tested - 17.6
Percentage total heifer calves vaccinated - 8.4

Indiana has not had a well-organized brucellosis eradication program until the past two years. Improvements made since 1951 have been outstanding. There is still no State Brucellosis Committee; however, all of the seven members of the State Livestock Sanitary Board are representatives of the livestock industry. It has not been possible to get a good volume of work done on account of other pressing livestock disease problems. There is every evidence that the brucellosis eradication project will be expanded until all herds in the State are receiving service.

IOWA

Funds expended for brucellosis eradication during 1953: State, \$201,137.65
Federal 146,943.58

Percentage cows tested - 7.

Percentage total heifer calves vaccinated - 5.

Although there had been considerable diversion of thought among the various interested groups as to the best approach in the way of formulating a program for the control and ultimate eradication of brucellosis in Iowa, most of this disappeared as a result of the several meetings held under the sponsorship of the Farm Bureau and the State Department of Agriculture. These meetings were attended by a selected group of livestock breeders, representatives of the State Department of Agriculture and the College Extension Service, women's groups, Personnel Director of Labor, Farm Bureau, and the U. S. Department of Agriculture. As a result of these meetings a State Brucellosis Committee was set up.

By agreement between the State and Federal forces, it was proposed to make the ABR test available to any county in which there was sufficient interest to give assurance that the positive herds would be subjected to the blood test. It was agreed that the Extension Service should carry on an educational campaign which would secure the cooperation of the veterinary profession and the cattle owners. Twenty-six of the ninety-nine counties of the State requested the ABR test after having the program fully explained through these educational meetings.

The Legislature passed two much needed laws, one to become effective July 4, 1954, requiring that all cattle changing ownership be negative to the test or calfhood vaccinates, except those moving to slaughter; and the second law requiring that all cattle used in the production of raw or pasteurized milk be from herds in one of the Plans approved by the State Department of Agriculture.

There is considerable interest at this time for legislation which will make possible area work for the control of brucellosis in Iowa.

KANSAS

Funds expended for brucellosis eradication during 1953: State, \$40,000 (est.)
Federal

Percentage cows tested - 5 1/4

Percentage total heifer calves vaccinated - 12

The largest number of cattle tested in any year in Kansas was 146,220 in 1936, with a percentage of infection of 12.5. Most of this testing was done without expense to the owner, except for the handling of his cattle.

Testing and calf vaccination in 1953 was 98,731 cattle tested, and 53,158 calves vaccinated. Practically all of the brucellosis testing and vaccinating done in 1953 was at the expense of the owner. Neither the former

nor the present program was organized effectively. It is generally conceded that if brucellosis eradication is the objective, it must be organized on an area basis.

Several meetings have been held recently by interested groups for the purpose of setting up a program along the lines recommended by all of the national groups who have studied the brucellosis problem.

KENTUCKY

Funds expended for brucellosis eradication during 1953: State, \$30,000
Federal 32,000

Percentage cows tested - 10.

Percentage total heifer calves vaccinated - 20

The Kentucky program is operated as a voluntary project with services provided through practicing veterinarians working on a per diem basis and with salaried veterinary personnel. Vaccine and service are provided for all official purposes within the limit of funds available. The Division of Livestock Sanitation has the authority to promulgate regulations necessary for area work, and it is believed that with funds for personnel, good progress could be made toward eradication. Municipal health regulations in adjacent markets will have a marked effect on the program requirements in Kentucky. It is expected that sizable increases in funds will be needed to provide for the control measures necessary to meet these requirements.

At the peak of the testing program, 118,534 cattle were tested in Kentucky, with an infection rate of 5.2 percent.

LOUISIANA

Funds expended for brucellosis eradication during 1953: State, \$127,448.20
Federal 100,347.34

Percentage cows tested - 6.6

Percentage total heifer calves vaccinated - 21

Louisiana did an outstanding job during the early years of the nationwide campaign to eradicate brucellosis. At that time, cattle owners were accustomed to concentrate their herds in connection with dipping against fever ticks, and readily responded to the idea of bringing their herds together for the blood test. However, with the loss of personnel during the war years, the rapid rise in cattle prices, and the accelerated movement of cattle, most of the gains made during the early years of the campaign were lost. There had not been sufficient education and indoctrination of cattle owners regarding the basic dangers and eventual losses from brucellosis for them to carry on an effective volunteer fight against the disease. Louisiana is in the unenviable position of having the highest percentage of Brucella infection of any of the States.

A very satisfactory brucellosis eradication program was set up during fiscal year 1953. Prior to that time, calf vaccination was the major emphasis, and the continuation of the vaccination program, with more emphasis on testing and on requirements concerning identification and movement of reactors to the test, should enable Louisiana to reduce its percentage of infection.

One of the outstanding features of the present program in Louisiana is that of using practicing veterinarians for much of the testing and calf vaccination. A State Brucellosis Committee has been organized to strengthen the program, with its first full meeting held in Baton Rouge on April 27, 1954. It will take increasing effort and expense to completely eradicate brucellosis in cattle in Louisiana, but I have no doubt about the success of the project if the present program is continued.

MAINE

Funds expended for brucellosis eradication during 1953: State, \$100,327.96
Federal, 113,054.88

Percentage cows tested - 86.3

Percentage total heifer calves vaccinated - 17.9

This State was certified brucellosis-free July 1, 1950 following a concentrated test and slaughter program. Maine was the third State to obtain this enviable position.

Technicians were employed to assist with the drawing of blood samples. Without the use of technicians, the goal of a certified status would have been considerably delayed.

The milk test has been used to very good advantage for more than a year as a screening process. Veterinarians, especially practicing veterinarians, take care of the retest work in most infected herds and advise owners relative to procedures that should be followed to eliminate the infection.

Vaccination of calves has not had a prominent place in the brucellosis program in Maine.

MARYLAND

Funds expended for brucellosis eradication during 1953: State, \$175,000
Federal 61,906.59

Percentage cows tested - 31

Percentage total heifer calves vaccinated - 52

All herds must be placed under Plan A and have at least one test completed by November 1, 1955, and all reactors must be removed for slaughter by December 31, 1955. Thereafter, only Plan A will be acceptable in Maryland.

Calfhood vaccination is performed at State-Federal expense in herds under Plans A and B. In herds operating under Plans C and D, the vaccine is furnished at State expense, but owner pays his private veterinarian for administering the vaccine.

All calfhood vaccination will be conducted by accredited veterinarians at owner's expense with the exception of vaccine which will be furnished by the State under the Emergency Brucellosis Eradication Program.

A conference is scheduled in the very near future between the Maryland State Board of Agriculture and the State and City Health Departments, which may modify some of the above requirements.

MASSACHUSETTS

Funds expended for brucellosis eradication during 1953: State, \$36,675
Federal 2,498

Percentage cows tested - 10

Percentage total heifer calves vaccinated - 60

For many years calves have been vaccinated without charge to the owner at the time that the annual tuberculin test was applied. As a result of only one visit to a herd annually, a considerable number of calves have been vaccinated at an age considerably beyond the maximum ages recommended. State law requires that all calves be vaccinated. An effort is being made to have calves vaccinated before reaching the maximum recommended age. Service may now be rendered free to owners for not more than three visits annually.

Provision has been made for certifying herds as free from brucellosis at the expense of the herd owner. Very few herds have been certified by this procedure.

A proposed act for brucellosis control and eradication has been presented to the present Legislature. This proposed act, supported by the State Brucellosis Council and the Massachusetts Farm Bureau, contains most of the features outlined in the model act on the same subject prepared by the Council of State Governments.

MICHIGAN

Funds expended for brucellosis eradication during 1953: State, \$220,171
Federal 130,145.98

Percentage cows tested - 21

Percentage total heifer calves vaccinated - 13

The Michigan brucellosis program follows a strictly area pattern. Area participation on a county-wide basis becomes compulsory upon vote of the County Board of Supervisors, and when personnel and funds will permit initiation of operations. All of the 83 counties in the States have voted favorably for participation and program work is in progress in 62 counties.

In the Northern counties (43), where infection is generally lighter, a test and immediate slaughter policy with indemnity for reacting cattle has been followed consistently. Vaccination has not been a part of the official program in these counties. Vaccination in the area is not prohibited as a private service to herd owners but is reportable to the State Bureau of Animal Industry in each instance as used.

In the Southern counties, the State has adopted a test and deferred slaughter program (in 20 counties) in which vaccination is employed in infected herds, optional to the owners. To be eligible for vaccination service, owners are expected to remove reactors to slaughter within a 6-month period. Accredited veterinarians under supervision of State and Bureau personnel do the greater part of the blood drawing and vaccinating under a standard fee schedule recently adopted by the State.

The program is well supported by all interested groups, and with sufficient funds and personnel could be expanded rapidly in the remaining counties. These seem to be the only limiting factors of significance to a complete State coverage.

MINNESOTA

Funds expended for brucellosis eradication during 1953: State: \$412,000
Federal 327,378.13

Percentage cows tested - 33
Percentage total heifer calves vaccinated - 30

The bovine brucellosis eradication program in Minnesota is well organized and continues to make steady progress. Emphasis has been placed on area work to the extent that all but five counties in the State have been signed up for operations on this basis. Much of the pioneering work in the milk ring test here in the United States has been carried out cooperatively by State/Federal regulatory forces and the University of Minnesota. It was largely from the results of these studies that official recognition was given to this procedure. Minnesota law provides for milk testing in any area of the State and compulsory blood testing in a given area when 67 percent of the livestock owners petition for this service. Regulations dealing with permanent identification of reactors and restricted movement of all cattle have helped limit the spread of infection in certified areas. While area testing is conducted free of charge, calf vaccination has not been given the same encouragement and when permitted must be done at owner's expense. In spite of this fact Minnesota ranked eighth in the Nation last year for the number of calves vaccinated. In addition to practitioner participation, veterinary students are used extensively in Minnesota during the summer months to accelerate the brucellosis program.

The outlook for eventual certification of the State is bright and Minnesota should be an early addition to this select group.

MISSISSIPPI

Funds expended for brucellosis eradication during 1953: State, \$128,949.
Federal 49,101.67

Percentage cows tested - 8
Percentage total heifer calves vaccinated - 35

The Mississippi brucellosis program is essentially a voluntary calf vaccination project in which the counties and State cooperate financially. The State furnishes all vaccine and cooperates in areas where the county

will participate to the extent of one-third of the cost of the program. The Livestock Sanitary Board may require a test of all cattle within an area when 85 percent of the cattle have been vaccinated as calves. State regulation now requires that all dairy type cattle be tested for brucellosis prior to sale at auction sales barns.

There is enthusiasm in all areas for this program as one which promises to establish a basis for complete eradication practices at a minimum of cost and disruption of the livestock industry.

MISSOURI

Funds expended for brucellosis eradication during 1953: State, \$36,555.49
Federal 15,442.81

Percentage cows tested - 3.85

Percentage total heifer calves vaccinated - 7.17

After a long period of relative inactivity on brucellosis eradication, Missouri is now developing a program that promises to make rapid progress in reducing the incidence of bovine brucellosis within the State. The recently constituted State Brucellosis Committee is taking an active part in helping re-stimulate interest in the brucellosis project. As an initial move in this direction, milk testing has been initiated in the predominantly dairy areas of the State. The interest stimulated by this work has been far greater than anticipated and, on the basis of the response from livestock producers, plans are being made for a rapid Statewide expansion of brucellosis operations. It is expected that the free vaccine now supplied by the State will be supplemented within the near future by free testing. Weaknesses of present regulations relating to bovine brucellosis are recognized by the State officials and arrangements are being made to strengthen them as rapidly as possible. It is also encouraging to see the financial support that is being provided for the reactivated brucellosis campaign. There is every reason to believe that funds will be available in proportion to the need.

The outlook for a concentrative brucellosis eradication program in Missouri is better now than it has been for many years, and with the energetic leadership it is receiving, excellent progress should be made within the next few years.

MONTANA

Funds expended for brucellosis eradication during 1953: State, \$77,037.14
Federal 64,215.98

Percentage cows tested - 6.5

Percentage total heifer calves vaccinated - 48

Brucellosis control in Montana was initiated with widespread calf vaccination, plus adult vaccination as indicated. In 1953 the State promulgated new regulations covering the requirements essential to an all-out eradication and area certification program. Full understanding and agreement between the cooperating regulatory groups, the livestock industry, veterinary profession, and Extension staff led to wide area testing and calf

vaccination during the year in eleven counties. The work is being done through the cooperation of practicing veterinarians who are compensated on a per herd per head basis plus the services of salaried Federal and State veterinarians who are assigned area supervision responsibilities. Both mobile field laboratories and a central laboratory are being used for blood testing and also milk ring testing where this practice can be employed. The support has been wholehearted from all groups and the progress is even greater than originally anticipated. There is good reason to believe that the solid background which has been laid through several years of vaccination, sporadic testing and a broad educational program will permit Montana to become the first certified State under the range type program.

NEBRASKA

Funds expended for brucellosis eradication during 1953: State \$40 000.
Federal,

Percentage cows tested 1.3
Percentage total heifer calves vaccinated 6.8

Until recently brucellosis eradication has been at a standstill. However a Statewide Brucellosis Committee was organized in September 1952 and a very active program is now being developed. Milk and blood testing has been stepped up to the highest level for more than nine years. If the present interest can be maintained service will be available to all owners of cattle in the State within a short time.

NEVADA

Funds expended for brucellosis eradication during 1953: State \$18 255.76
Federal 17 257.93

Percentage cows tested 3.2
Percentage total heifer calves vaccinated 38.3

For a number of years Nevada has had a very active program for brucellosis eradication for dairy herds. The percentage of infection in these herds is now very low.

Most livestock and dairy products exported from the State go to California. The California regulation which becomes effective in 1956 has had a very stimulating effect on calf vaccination particularly in range herds.

State and Federal funds are inadequate for a Federal program. Eighty five percent of the State is public domain and perhaps in no other State are the people more justified in the opinion that the Federal Government should contribute more than half of the cost for this program. It is unfortunate that all interested groups have not been called together to work as a State Brucellosis Committee.

NEW HAMPSHIRE

Funds expended for brucellosis eradication during 1953: State \$105,243.91
Federal 36,076.08

Percentage cows tested - 100.

Percentage total heifer calves vaccinated - 52.2

New Hampshire was the second State to be declared a certified brucellosis free area and has held this position since August 1, 1949.

Practicing veterinarians paid from State or Federal funds have done practically all of the field work in connection with the project.

Plan A, test and slaughter has always been the main plan of attack. Calf vaccination has increased considerably since the start of the project. The State has by far the highest percentage of herds certified as brucellosis free. To date the benefits of the milk ring test have not been incorporated in the program.

NEW JERSEY

Funds expended for brucellosis eradication during 1953: State \$137,817.08
Federal 30,790.17

Percentage cows tested 65.5

Percentage total heifer calves vaccinated - 91

New Jersey is officially committed to the eradication of brucellosis. The program is fully supported by the livestock industry. A very effective Brucellosis Advisory Committee is in existence. Progress made during recent years has been rapid.

The State Public Health Code was amended recently to require that by April 1, 1958 milk may not be sold within New Jersey unless obtained from animals free from brucellosis.

NEW MEXICO

Funds expended for brucellosis eradication during 1953: State \$6,481.36
Federal 54,170.78

Percentage cows tested - 6.7

Percentage total heifer calves vaccinated 5.2

As in most of the range States, New Mexico dairy producers have accepted Plan A and have reduced Brucella infection to a point where the State could in all probability be certified as a modified brucellosis free area except for the fact that the status of range herds has not been fully determined.

Range herd owners have continued to improve procedures for completing the brucellosis eradication program.

NEW YORK

Funds expended for brucellosis eradication during 1953: State, \$635,662.00
 Federal 26,485.95

Percentage cows tested 22.2
Percentage total heifer calves vaccinated - 71.3

New York State pioneered in calf vaccination, and has more certified brucellosis-free herds than in any State. Work in this State continues to place emphasis on these two items. Considerable effort is being made through an educational program to reduce the ages of vaccination of calves to 6 to 8 months inclusive. Owners of herds that have been operating under a vaccination program only are being encouraged to blood-test and when tested 64 percent of such herds were found to be clean on initial test. There are no municipalities that have placed restrictions on the sale of pasteurized milk; however, as a result of the New Jersey regulations there was a 20 percent increase in the number of herds blood-tested.

The milk ring test is being used on a trial basis. Consideration is being given to extending the use of this test.

NORTH CAROLINA

Funds expended for brucellosis eradication during 1953: State \$84,814.66
 Federal 67,737.16

Percentage cows tested - 25
Percentage total heifer calves vaccinated - 1.14

The State of North Carolina was the first to become a certified brucellosis-free area, which was in July 1942. This goal was reached as a result of a concentrated test and slaughter program (Plan A) under a law enacted by the Legislature which stipulates that when any cooperating Board of Commissioners vote to establish the work and sign an agreement with the State and Federal cooperative agencies, the work in that particular county becomes compulsory.

In 1951 the State Board of Agriculture amended its regulations making it unlawful to retain a brucellosis reactor in any herd producing milk for human consumption, either raw or pasteurized.

Vaccine is provided by the State, with owners reimbursing the State for the amount used. Vaccine has not been used extensively in the brucellosis eradication project.

NORTH DAKOTA

Funds expended for brucellosis eradication during 1953: State, \$145,000.
Federal 125,978.66

Percentage cows tested - 51.

Percentage total heifer calves vaccinated - 11

The brucellosis eradication program in North Dakota has been built around a test and slaughter plan. In cases where owners with a high degree of infection are not able to dispose of reactors immediately without severe financial loss, they are permitted to hold reactors for temporary periods.

An area calf vaccination plan has been carried on in counties where the initial infection rate was heavy. This has resulted in a substantial drop in the percentage of infection, as evidenced by the reactors disclosed in the herds tested following several years of calf vaccination.

All animals in an infected herd are quarantined pending a clean herd test.

Area testing has been carried on for many years. The demand for the work exceeds the ability of officials to carry out the work with the present personnel and funds available. Since 1940, regulations require that cattle offered for public or private sale be negative to a test for brucellosis applied within 30 days of sale or originate from a certified brucellosis-free herd. Technicians have been employed to draw blood samples and to collect milk samples.

OHIO

Funds expended for brucellosis eradication during 1953: State, \$220,000.
Federal 53,755.

Percentage cows tested - 16.6

Percentage total heifer calves vaccinated - 26.

Ohio has consistently carried on sound livestock disease control programs. The brucellosis control project is no exception. Leadership so essential to success in any endeavor has been excellent in Ohio, especially during the past few years.

The milk test is used extensively. Ohio is the only State where large scale milk collections are made at the farm instead of at milk collecting stations. It is the opinion of those in charge of the program that personal contacts with the farmer are worth more than the additional cost of collecting the samples, as compared to the cost of making collections at milk collecting stations.

There are Health Committees, and all groups are working together harmoniously. Fifty-one counties are doing area work on a voluntary basis. It is anticipated that all counties will be doing area work by 1958.

There is no State Brucellosis Committee, as such; but each livestock organization has a health committee to which members of both State and Federal regulatory offices are appointed. These committees function individually or collectively, not only as regards brucellosis but in all health measures.

OKLAHOMA

Funds expended for brucellosis eradication during 1953: State, \$84,000.
Federal 20,800.

Percentage cows tested - 3.2

Percentage total heifer calves vaccinated - 6.5

Oklahoma carried on an extensive test and slaughter program during the early years of the brucellosis eradication campaign. For the past several years the volume of testing has dropped off considerably.

Calf vaccination is being used widely in both range and dairy herds.

OREGON

Funds expended for brucellosis eradication during 1953: State, \$150,000.
Federal 136,501.56

Percentage cows tested - 42

Percentage total heifer calves vaccinated - 42

With one exception, all counties where dairy cattle predominate will be ready for certification as modified brucellosis-free areas this year. The percentage of infection in this one county is below one percent; however, herd infection exceeds the five percent allowed under present uniform methods for certification.

Marked improvements have been made in procedures adopted for range areas, and if the present rate of progress can be maintained, Oregon will be one of the first Western States to qualify as a modified, certified brucellosis-free State. In no other State has the county government accepted more of the responsibility for eradication of this disease.

PENNSYLVANIA

Funds expended for brucellosis eradication during 1953: State, \$1,077,824.
Federal 264,338.11

Percentage cows tested - 30

Percentage total heifer calves vaccinated - 50

This State has one of the most active and effective brucellosis committees. In addition to the State Committee, County and regional committees have been organized. The suggestions and approval of proposed procedures by these committees have been very beneficial in overcoming problems and developing acceptable plans for control and eradication.

The milk ring test has been adopted for use primarily in certified areas. The State has been divided into three districts with the expectation that a ring test laboratory and crew will be assigned to each district. Very satisfactory progress is being made toward the complete eradication of brucellosis in Pennsylvania.

RHODE ISLAND

Funds expended for brucellosis eradication during 1953: State, \$19,550.00
Federal, 2,640.00

Percentage cows tested - 19

Percentage total heifer calves vaccinated - 80

A good percentage of the calves raised in this State are vaccinated at State and Federal expense.

Provision is made for certifying herds as free from brucellosis. A small percentage of herds in the State are certified.

Rhode Island is making a very comprehensive check on all imports.

SOUTH CAROLINA

Funds expended for brucellosis eradication during 1953: State, \$53,686.27
Federal, 44,301.54

Percentage cows tested - 28.79

Percentage total heifer calves vaccinated - 13.03

There is general interest among the livestock groups and associated agricultural agencies in a constructive brucellosis eradication program. Some confusion has resulted recently from cross-thinking on the type of program most adaptable to South Carolina conditions, with the pendulum swinging from the extreme test and slaughter policy to vaccination alone. At the present time, however, the program is approaching a better balance and work is progressing on an area basis in 11 counties with over-all consideration being given to a proper integration of accepted procedures. The State laws are adequate for the support of practices necessary for brucellosis eradication under South Carolina conditions. A new law which will go into effect in 1955 requiring all milk for sale to be from brucellosis-free herds will have an effect on the tempo of the program. There is limited accredited veterinarian participation - funds being the controlling factor in this regard.

SOUTH DAKOTA

Funds expended for brucellosis eradication during 1953: State, \$2,115.62
Federal, 3,487.26

Percentage cows tested - .02

Percentage total heifer calves vaccinated - 23.3

Until the last year, the brucellosis eradication program has operated on a very limited scale. In 1953 an extensive calf vaccination program was inaugurated in the range area and milk and blood testing in the dairy sections of the State. The range operators have borne the expense for calf vaccination, and blood testing is also done at the owner's expense. An excellent start has been made; however, in my opinion it will be necessary to set the program up in such a way that the owner will not have to make a direct payment for services each time his calves are vaccinated or his herd bled. Experience has shown that when the owner has to make a direct payment for service, he too often exercises the prerogative of discontinuing the program short of reaching the objective.

TENNESSEE

Funds expended for brucellosis eradication during 1953: State, \$180,000.
Federal 42,000.

Percentage cows tested - 2.8

Percentage total heifer calves vaccinated - 27.2

Tennessee carried on an extensive test and slaughter program during the early years of the brucellosis eradication campaign.

For the past several years, calf vaccination has been the major effort, and very satisfactory progress is being made.

TEXAS

Funds expended for brucellosis eradication during 1953: State, \$44,676.19
Federal 10,940.76

Percentage cows tested - 1.5

Percentage total heifer calves vaccinated - 1.5

Until recently there has not been sufficient interest on the part of producers in Texas to sustain an organized program for brucellosis eradication. For this reason, practically all work done has been by practicing veterinarians at the expense of the owner.

In February of this year a Regional Brucellosis Conference, sponsored by The Progressive Farmer, was held in Dallas, Texas. Following this meeting, a Statewide meeting was held at College Station, Texas, on April 14. Unanimous decision was reached at this meeting to set up a State Brucellosis Committee, with authority to develop and support brucellosis eradication.

UTAH

Funds expended for brucellosis eradication during 1953: State, \$16,803.18
Federal 35,601.14

Percentage cows tested - 16

Percentage total heifer calves vaccinated - 23.5

Utah has continued to improve laws, regulations and application of sound procedures for brucellosis eradication. Like Idaho, the livestock producers have accepted a direct tax on their livestock, as a means of raising revenue so that the project can be administered by regulatory officials of the State.

This tax applies to all cattle other than range cattle. Range operators are required to make payments for service when it is rendered by the State.

"Effective July 1, 1954, no female cattle or breeding bulls more than six months of age shall be sold unless they have been tested and found negative within 30 days prior to date of sale" - Utah Brucellosis Eradication & Control Act. Exceptions are similar to those contained in the proposed Federal Regulation pertaining to interstate movements.

VERMONT

Funds expended for brucellosis eradication during 1953: State, \$101,251.83
Federal, 26,996.92

Percentage cows tested - 16.2

Percentage total heifer calves vaccinated - 90

The cattle owners in Vermont have leaned heavily on calf vaccination as a brucellosis control measure. The State is near the highest in the percentage of calves being vaccinated. A very definite effort is being made to have calves vaccinated before reaching the maximum recommended age.

The testing of herds is on the increase and is expected to develop rapidly as funds are available and this phase of the program is stimulated.

The extension Service has been active in stimulating the program through education.

The advantages of the milk ring test for this dairy State are being considered but the test has not been adopted as part of the program.

Eradication of brucellosis on an area basis is not carried out.

VIRGINIA

Funds expended for brucellosis eradication during 1953: State, \$128,472.00
Federal 36,698.00

Percentage cows tested - 20 1/2

Percentage total heifer calves vaccinated - 39

The Virginia State program has reversed from its original position as an area test and slaughter project, largely because of limited finances and personnel, to a program of voluntary vaccination and testing under a plan of individual herd certification with the owner assuming an increasing share of the expense. Laws are adequate for support of recommended area practices, and area participation can be ordered by the State Veterinarian when in his opinion this is justified. Present operations do not include the use of the milk test. All reactors are required by regulation to be tagged immediately and branded before movement from premises where tested for slaughter. Reactors to be slaughtered promptly or at such time as the State Veterinarian may deem expedient without indemnity.

Calves vaccinated when 4 to 8 months of age are identified by tag number in the right ear and a single V-notch in the left ear; if over 8 months of age by a tag number in the right ear, and a double V-notch in the left ear. Legible tattoo numbers are acceptable in lieu of notches and tag numbers.

WASHINGTON

Funds expended for brucellosis eradication during 1953: State, \$240,000 (approx.)
Federal, 201,065

Percentage cows tested - 40

Percentage total heifer calves vaccinated - 30

Washington has had an active program since the inception of the nationwide effort to eradicate brucellosis. The State officials have revised and strengthened regulations to conform to the recommendations of the U. S. Livestock Sanitary Association and approved by the U. S. Dept. of Agriculture.

New regulations provide that cattle for sale, other than for slaughter, must originate in negative herds. Where reactors are found at community sales, the herds of origin are placed under quarantine until negative. Farm auction sales of cattle cannot be made where reactors have been found until the herd has a negative test. State import regulations require cattle, except officially vaccinated under 24 months, be negative to test.

The new milk ordinances in all major cities of the State require herds to be negative to the brucellosis test by July 1, 1954. Four counties now have ordinances requiring that reactors be removed from premises for slaughter within 30 days from date of test.

There are 19 counties certified as modified brucellosis-free, two more counties will qualify this month, and in seven additional counties intensive work is being conducted for the purpose of having an area county-wide test.

The State Livestock Advisory Committee on Brucellosis, under chairmanship of Mr. Omdahl, Director of Agriculture, has recently been formed which will greatly assist in the coordination of field work. The Cattlemen's Association and Dairy Association have all endorsed a strong and effective brucellosis eradication program.

WEST VIRGINIA

Funds expended for brucellosis eradication during 1953: State, \$103,213.66
Federal 19,747.07

Percentage cows tested - 41.3

Percentage total heifer calves vaccinated - 8.8

For West Virginia, emphasis is placed on Plan A as a plan for eradication. In some areas where calf vaccination has been carried on over a period of several years, the percentage of infection found as a result of testing herds to meet milk market requirements has been surprisingly light.

Most reactors are tagged and branded and a high percentage removed for immediate slaughter.

The ring test has been of assistance in screening areas for infected herds. Its value justifies more general use in the dairy areas.

The program in West Virginia should be greatly expanded. All segments of the industry and other interested agencies, if brought together, should be able to assist in adding support and in making the program more effective.

WISCONSIN

Funds expended for brucellosis eradication during 1953: State, \$1,646,800.
Federal 310,563.22

Percentage cows tested - 24.4

Percentage total heifer calves vaccinated - 68.

A great deal of credit must be given to the people in Wisconsin for the all-out effort made in that State during the past few years to eradicate bovine brucellosis. In magnitude, the Wisconsin program is the largest ever under-

taken by any State. As might be expected, there were certain weaknesses in the methods initially employed; however, for the most part an effort has been made to rectify mistakes as rapidly as possible. The Wisconsin program has demonstrated beyond question the adaptability of the milk ring test to an intensive eradication campaign in areas that are predominantly dairying. At the present time the 6th round of milk tests is being conducted in Wisconsin with continuing evidence of the value that can be derived from this procedure. The practicing veterinarians have contributed much to the progress made toward eradicating brucellosis in Wisconsin. Without their cooperation the imposing manpower requirements of this program could never be met. Impending restrictions by milk marketing outlets have been instrumental in gaining the support of the cattle owners for an active eradication project. From the outset the Wisconsin Brucellosis Advisory Committee has played an important rôle in advancing the brucellosis program. The influence of this body has been invaluable from the standpoint of obtaining the gradual refinement of procedures necessary to insure continued progress. One of the important weaknesses of the Wisconsin program, namely, failure to identify reactors in Plan B herds will probably be corrected within the near future, as a result of the Advisory Committee's recommendation.

WYOMING

Funds expended for brucellosis eradication during 1953: State, \$10,721.91
Federal, 16,349.14

Percentage cows tested - 4.

Percentage total heifer calves vaccinated - 36.

In this, as in most of the range States, laws and regulations apply principally to dairy cattle. The dairy industry has done a creditable job, and except for shortage of funds and personnel, their herds would be in most instances brucellosis-free.

Range operators are continually improving their position with regard to brucellosis through calf vaccination.

PUERTO RICO

Funds expended for brucellosis eradication during 1953: Puerto Rico \$98,062.00
Federal 44,953.06

Percentage cows tested - 16.1

Percentage total heifer calves vaccinated - 10.9

Puerto Rico has developed a very sound brucellosis eradication program. Until very recently, it has been necessary for Puerto Rico to carry a very heavy financial burden in connection with cattle fever tick eradication. This project has been practically completed, and now the brucellosis eradication project will proceed more rapidly. Procedures are being considered for requiring compulsory slaughter of all reactors, when in any area the infection has been reduced to one percent or less. You will note the percentage of infection for the entire area is only slightly above one percent.

As you have listened to the reading of this report, I am sure some of you have wondered why the statistics quoted for each of the States were not confined to the tabulated information. Those statistics quoted in the report for each State will enable you to determine at a glance which States will have to step up their programs if they are to reach the goal of brucellosis eradication. You will note there are several States where both testing and calf vaccination are very low from the percentage standpoint. I know you will accept the responsibility, as you did last year, of bringing this matter to the attention of those States which do not yet have a full brucellosis eradication program. The objective in any disease eradication project is as near 100 percent participation as it is possible to obtain.

You will recall from the report last year that excellent progress was made in Jersey County, Illinois as a result of calf vaccination for a period of ten years. At no time during the Jersey County project were we able to vaccinate more than 75 percent of the calves in the area.

Further studies of calf vaccination have been made in New York and California on a much larger scale than in Jersey County. A higher percentage of the calves were vaccinated in these States, and it seems evident that we can depend upon similar results to those obtained in Jersey County when a larger percentage of calves are vaccinated over a shorter period of time. A report of all this research will be made by the Animal Disease and Parasite Research Branch of Agricultural Research Service at the next meeting of the U. S. Livestock Sanitary Association. We are hopeful, of course, that this report and information gathered by other research workers will aid in removing a great deal of the stigma attached to vaccinal reactions in herds where there is no other evidence of Brucella infection.

There has never been any doubt in my mind that the results obtained in Jersey County, Illinois, by calf vaccination can be duplicated by the test and slaughter method and can be accomplished much more quickly. However, I think we can agree the test and slaughter method would have proven too expensive in some areas at the beginning of the nationwide program, and completely impractical in others. With the vast amount of vaccination that has been done, and with present surpluses, there are many areas where brucellosis can now be eradicated in a very short time if we are willing to set ourselves to the task.

We still have in the brucellosis eradication project more than the ordinary number of obstacles to cope with. However, there is much to be encouraged about. There is at present a greater degree of accord on procedures and the objective than at any time since the project was begun on a nationwide scale in 1934. During the past 60 days I have either visited or been in touch by telephone with most of the State and Federal cooperating officials. There is an unusual demand for service in nearly all of the States. The most common reply following inquiry as to progress being made is, "Our only serious difficulty is our inability to satisfy requests for service with present personnel and funds available to us." More State funds were spent on brucellosis eradication during the past fiscal year than for any previous year. When we take into consideration the fact that almost 60 percent of agricultural income is from livestock, and the further fact that brucellosis could be eliminated from livestock at a cost of the losses sustained by the livestock industry in any one year, we need no further justification for the expenditures being made for this important project.

There were more cattle tested last year than have been tested since 1939, and more calves were vaccinated than for any previous year in the history of the program. These statistics are from our last fiscal report. However, to give you an idea of the present expansion of the brucellosis eradication program, there were over one million cattle blood tested, and over one million ABR tests run last month (March 1954). If this rate continues, the work done in all phases of the program in 1954 will far exceed that done in any previous year. State expenditures have been increased during 1954, and marked increased appropriations will be requested for 1955 and 1956. There are a few States where Federal expenditures exceed those of the State; however, this is the exception and the over all State expenditures are at the present time approximately 70 percent of the total.

In several of the States, including Missouri and Nebraska, very active programs have been inaugurated since our last Annual Meeting.

The Progressive Farmer of Dallas, Texas, sponsored a Southern States Regional Brucellosis Conference which was held in Dallas in February, 1954. The results of this Conference corroborate the statement mentioned over and over again by our President, Mr. W. D. Knox, that the demand for this work should come from the grass roots. This was the first Regional Conference arranged for by a farm publication. Since this Conference, consideration has been given to the setting up of State Brucellosis Committees in those States represented at the Conference where such Committees do not already exist.

On April 14 I attended a meeting of representatives of range and dairy cattle, and sheep, swine, and goat organizations held at College Station, Texas. It was unanimously agreed at this meeting that a State Brucellosis Committee should be set up to study and support the brucellosis eradication project in Texas.

On April 15 a meeting of dairymen from Northeast Texas, Southern Arkansas, and Northwest Louisiana was attended at Shreveport, Louisiana. There were approximately 300 producers in attendance, and it was one of the best meetings of its kind I have ever attended. This meeting was sponsored by KWKH Radio Station, Shreveport, Louisiana and Agricultural Colleges of Texas, Arkansas, and Louisiana.

On April 27 the first meeting of the Louisiana Brucellosis Committee was attended. This Committee held an all day session, and the following sub-committees were set up:

Subcommittee on the Evaluation of the Present Program
" " Education
" " Legislation and Appropriations

Following adjournment of the Committee meeting, the subcommittee on Legislation and Appropriations met with the State officials to consider budget matters which will come before the Louisiana Legislature this month.

We are, of course, attending meetings continually; however, these meetings referred to are mentioned primarily because they all grew out of the Regional Brucellosis Conference sponsored by the Progressive Farmer, and illustrate what can happen when those nearest the problem decide to take action.

I mentioned to you at the last Annual Meeting the outstanding work being done by Dr. J. L. McAuliff, practicing veterinarian of Cortland, New York, who is Chairman of the Brucellosis Committee of the A.V.M.A. Dr. McAuliff has recently corresponded with the President of each State Veterinary Medical Association suggesting that the practicing veterinarians give more attention to the brucellosis problem. There is still much room for developing a better relationship with the practicing veterinarians who will have to do the major part of the brucellosis eradication work at the farm or ranch level.

Tabulated information was prepared recently showing progress being made in each of the States on a Regional basis for the fiscal year 1953. This information is attached hereto. You will note the Northeastern Region has tested more than twice as many cattle and vaccinated more than twice as many calves, from the standpoint of percentage, than in any other region. Moreover, the percentage of infection is lower for the Northeastern States than for any other region. This is especially significant when it is understood that the degree of infection was relatively high at the time the program was begun in the Northeastern States, as compared to other regions. Practicing veterinarians have done most of the work in the Northeastern Region.

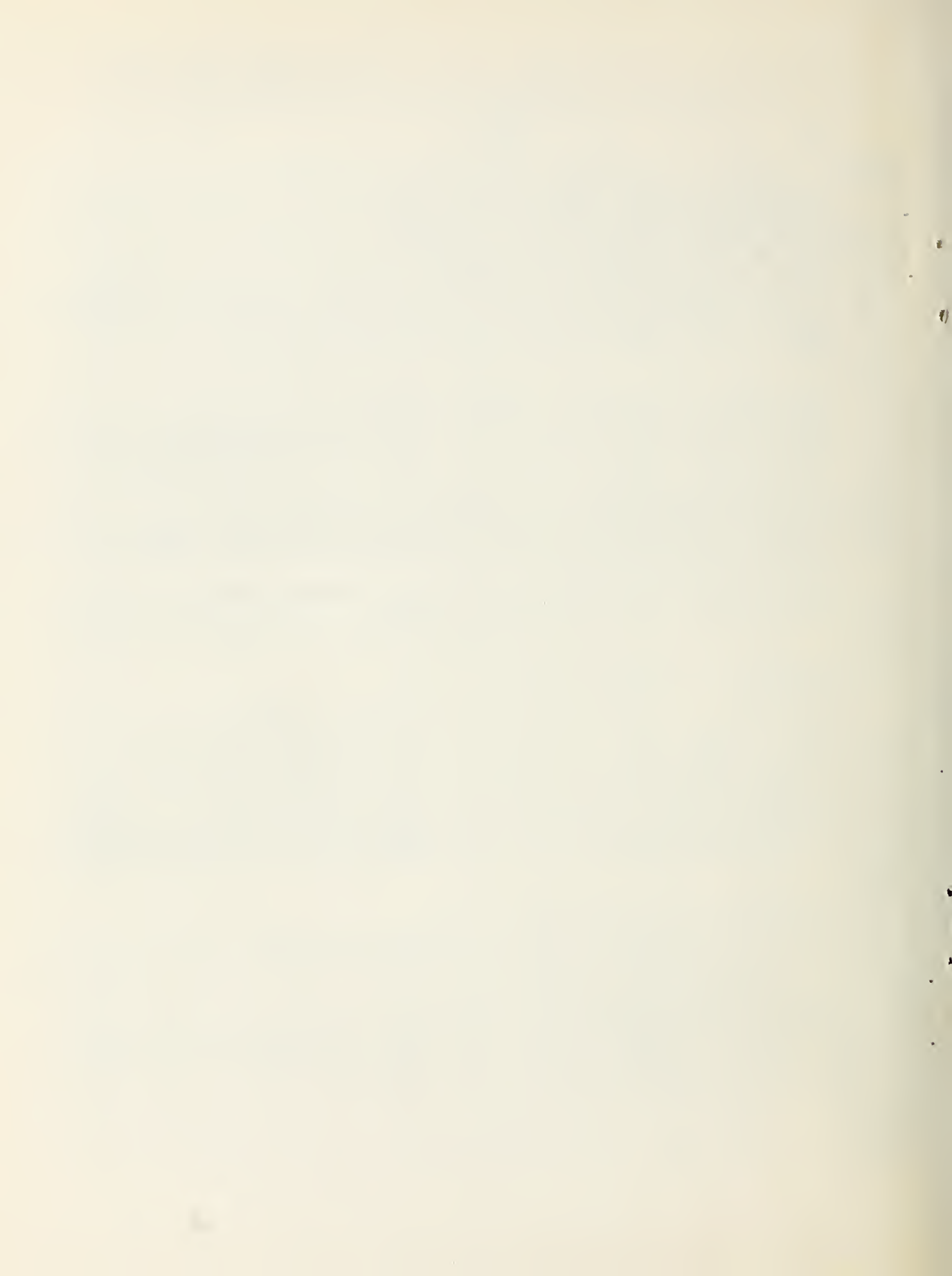
You are familiar with the marked impetus given this project as a result of the adoption of milk ordinances during the past few years. You are aware, also, of the proposed interstate regulation pertaining to brucellosis published in the April 8, 1954 issue of the Federal Register. Such a regulation, if properly enforced, will be a most effective tool in completing brucellosis eradication. The principle objection to the proposed regulation thus far made has come from operators of auction markets. The auction market has filled an important need for the livestock industry and a way must be found to avoid undue interference with this method of marketing livestock. However, if we are to continue our march in livestock disease eradication, we should require the same type of animal disease inspection at auction markets which has proven so successful at public stockyards. Any point where livestock are assembled presents a hazard from the standpoint of spreading disease, and the present type of inspection service at many auction markets is inadequate. Enforcement of the interstate regulation pertaining to brucellosis will depend upon close cooperation between State and Federal agencies. There are now several States where State highway traffic officers are assisting in checking truck movements of livestock. In one State more than 80 percent of such movements were being made without regard to State regulations. Within less than two months after the Highway Patrol started checking such movements, more than 90 percent were entering the State in compliance with State regulations. I have been hopeful that adoption of this regulation will encourage further uniformity in State regulations, which is essential to improving our relations with the livestock industry.

To refuse recognition of calves vaccinated under veterinary supervision in those areas where veterinary service is at present inadequate can result only in a feeling on the part of producers in those areas that we are not willing to assist them in the best way now possible to solve their problem.

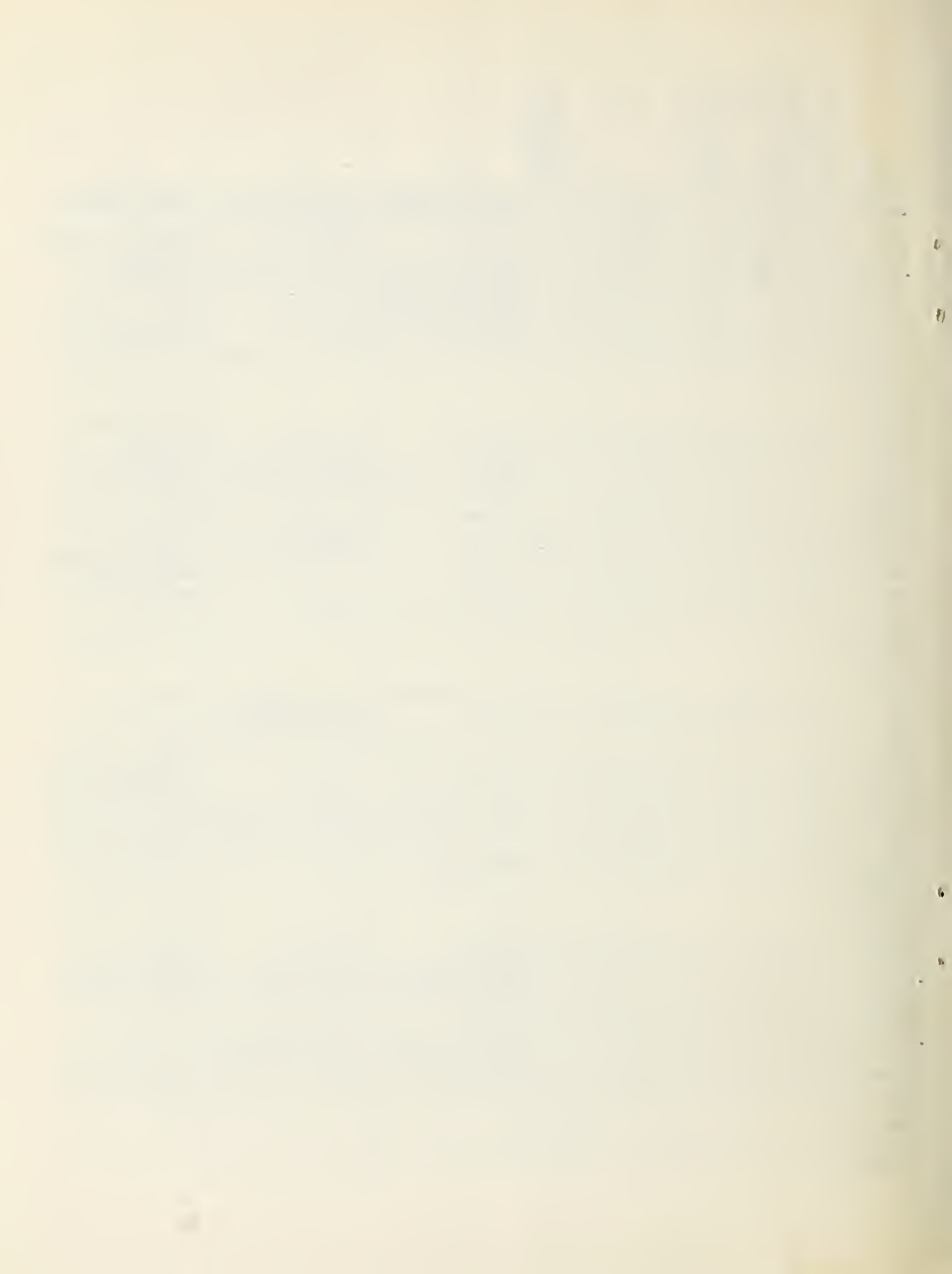
In conclusion, may I point out once more that there is greater need to be reminded than to be converted. There have been included in the recommendations of brucellosis eradication which are acceptable to this Committee all of the basic rules for a successful project when we are willing to apply them. A review of these recommendations, which are published as, "UNIFORM METHODS AND RULES FOR THE ESTABLISHMENT AND MAINTENANCE OF CERTIFIED BRUCELLOSIS-FREE HERDS OF CATTLE AND MODIFIED CERTIFIED AREAS, Unanimously adopted by the United States Livestock Sanitary Association, September 25, 1953, and approved by the Bureau of Animal Industry effective December 16, 1953," should be made by every group interested in promoting the brucellosis eradication project. There is not a single item in these recommendations which should be disregarded. The degree of compromise will represent the degree of success in an economically sound brucellosis eradication project.

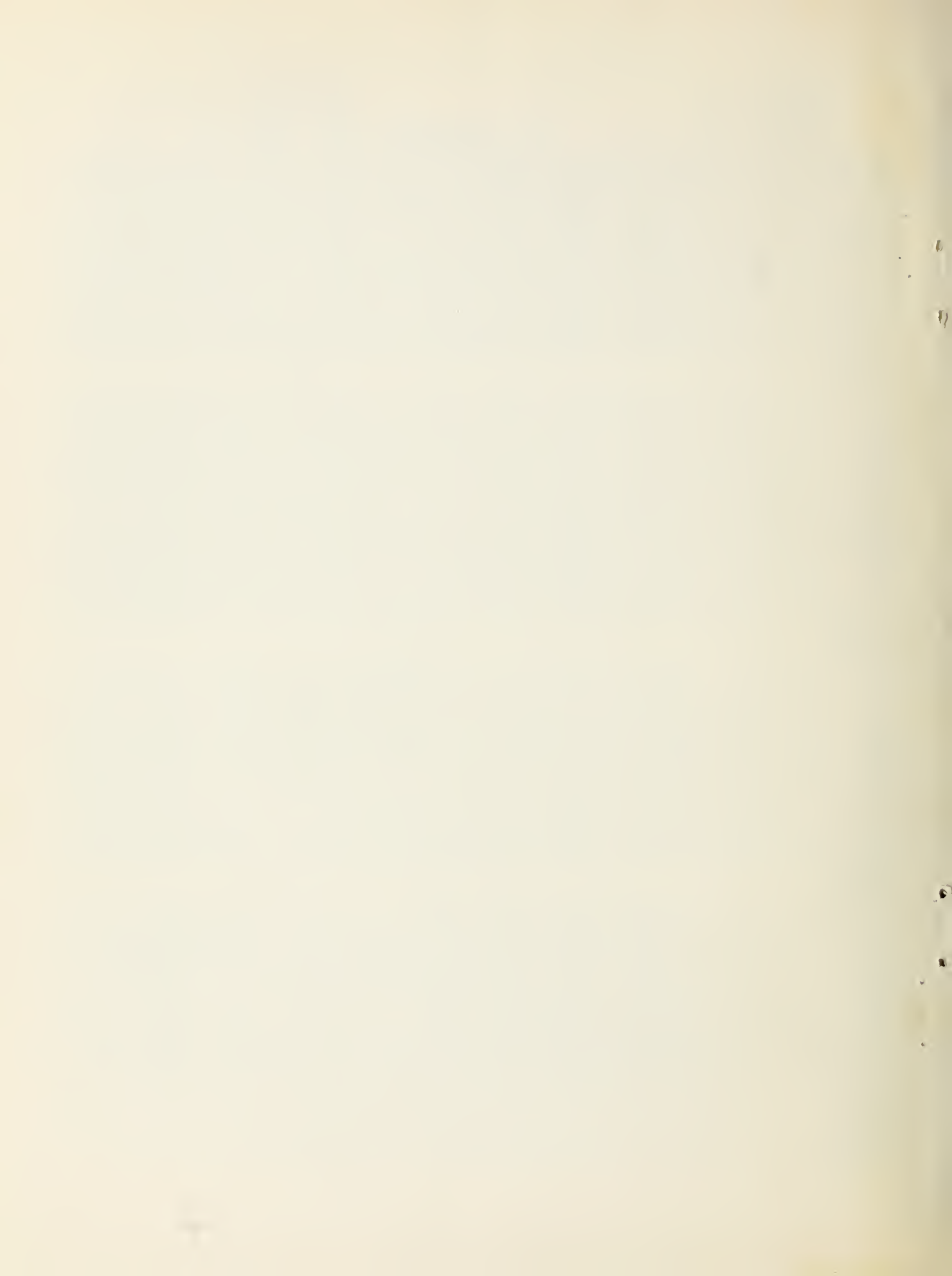
These Recommendations may be obtained from practicing veterinarians, State or Federal Livestock Sanitary Officials, the County Agent, or Director of Extension. Extension Service has accepted the most important role in any progressive endeavor of agriculture, that of education.

Please accept my appreciation for the time and money you have spent in supporting this Committee. I know your only reward will be the satisfaction you will obtain from making available to all of the people a more abundant and wholesome supply of food of animal origin.



EASTERN AREA	INDENITY PAID ON REACTORS	NEGATIVE TEST FOR MOVEMENT EXCEPT FOR IMMEDIATE SLAUGHTER	SERVICES TO OWNER WITHOUT COST FOR:	REGULARLY EMPLOYED VETERINARIANS DIRECT ALL PHASES OF HOEFT	APPROVED PROCEDURES				OFFICIALLY VACCINATED CALVES REACTING 1-100 AFTER 3 MONTHS OF AGE (A REC. BRAND DEL.)	METHOD OF PAYING PRACTICING VETERINARIANS		
					A	B	C	D		BLEEDING	BRANDING	VACCINATING
Connecticut	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	30	25¢ per head, plus \$2.00 per head	Done by State with State funds	25¢ per head, plus \$2.00 per head
Delaware	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	30	\$2.00 per herd of 6-50¢ per head for any over 6	Done by Federal and State veterinarians	40¢ per head, vaccine furnished by State
Maine	Yes	-	Yes	Yes	Yes	Yes	Yes	No	36	\$2.00 per stop & 20¢ per head	\$5.00 per stop, plus \$1.00 each after 1st head	50¢ per head
Maryland	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	30	Owner's expense	Owner's expense	Vaccine furnished by State serv. by priv. vet. at owner's exp.
Massachusetts	No	Yes	Yes	Yes	No	No	Yes	Yes	30	\$1.00 per herd, 25¢ per head	\$2.00 per herd, 25¢ per head, if supplied	\$1.00 per head
New Hampshire	Yes	Yes	Yes	Yes	Yes	No	No	No	30	\$1.00 per stop, \$1.00 per stop & 25¢ per head	State Livestock Inspectors	\$1.00 per head
New Jersey	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	30	\$2.65 per herd, 25¢ per head	State or Federal employees only	State furnishes vaccine \$2.40 per herd, 50¢ per head
New York	No	No	Yes	Yes	No	Yes	Yes	No	-	\$3.65 per herd for bl. & br. at same time & 25¢ per head	Not required	\$2.55 per herd, & 25¢ per head
Pennsylvania	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	30	\$2.00 per herd, 25¢ per head, & \$1.00 & 25¢ per hd. & test	District agent's office	\$3.00 per herd, & 30¢ per hd.
Rhode Island	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	30	Owner's expense	Owner's expense	Owner's expense
Vermont	No	No	Yes	Yes	Yes	No	Yes	Yes	30	\$2.40 per herd, & 22¢ per hd.	None	\$2.40 per herd, & 22¢ per head
West Virginia	Yes	No	Yes	Yes	Yes	No	No	No	30	\$1.50 per herd, & 40¢ per hd.	\$1.50 per herd, & 40¢ per hd.	\$1.50 per herd & 40¢ per head
AREA TOTALS												
SOUTHERN AREA												
Alabama	No	No	Yes	Yes	Yes	No	Yes	Yes	30	None	None	50¢ per head, vaccine furnished by State
Arkansas	No	No	Yes	Yes	Yes	Yes	Yes	Yes	30	Owner's expense	Owner's expense	Owner's expense
Florida	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	30	Owner's expense	Owner's expense	Owner's expense
Georgia	Yes	No	Yes	Yes	Yes	Yes	No	Yes	24	50¢ per head	No additional payment for branding reactors	50¢ per head
Kentucky	No	No	Yes	Yes	Yes	Yes	Yes	No	36	Per diem \$15.00 per day and mileage	Per diem \$15.00 per day and mileage	30 calves constitutes a day's service
Louisiana	No	No	Yes	Yes	Yes	Yes	Yes	Yes	30	50¢ per head for 9 to 25 head;	40¢ per head for 26 to 50 head;	30¢ per hd. for 51 hd. & over
Mississippi	No	No	Yes	Yes	Yes	Yes	Yes	No	36	Owner's expense	Owner's expense	50¢ per head
North Carolina	Yes	Yes	Yes	Yes	Yes	No	No	No	30	Owner's expense	Owner's expense	Owner's expense
Oklahoma	No	No	Yes	Yes	Yes	Yes	Yes	No	30	50¢ per head	Included in 50¢ per head bleed mg fee	50¢ per head
South Carolina	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	30	50¢ per head	Regulatory personnel only	\$8.00 1st. 3 hours, \$2.00 per hour for additional hours
Tennessee	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	30	50¢ per head	None	50¢ per head plus \$1.00 per stop
Texas	No	No	No	No	Yes	Yes	Yes	No	30	Owner's expense	Owner's expense	Owner's expense
Virginia	No	No	Yes	Yes	Yes	Yes	No	No	30	50¢ per head; Plan A only	50¢ per head	25¢ per head
Puerto Rico	Yes	No	Yes	Yes	Yes	Yes	Yes	No	36	Owner's expense	Owner's expense	Owner's expense
Virgin Islands												
AREA TOTALS												
CENTRAL AREA												
Illinois	No	Yes	Yes	Yes	Yes	Yes	Yes	No	36	\$2.50 per herd, 50¢ per head	\$2.50 per herd, 50¢ per head	\$1.00 per head
Indiana	No	Yes	Yes	Yes	Yes	Yes	Yes	No	24	75¢ per head	\$2.50 for 1st. reactor, 50¢ for all additional	None
Iowa	Yes	No	Yes	No	Yes	Yes	Yes	No	38	\$2.00 per herd, 50¢ per head	\$5.00 1st. animal - 50¢ each additional; \$10.00 limit per herd	No payment
Kansas	-	-	-	-	-	-	-	-	-	-	-	-
Michigan	Yes	Yes	Yes	Yes	Yes	Yes	No	No	24	\$2.00 per herd stop & 35¢ per head	\$3.00 per herd stop & 50¢ per head	\$2.00 per herd stop & 50¢ per head
Minnesota	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	24	For bleeding and branding	50¢ per head	Owner's expense
Missouri	No	No	Yes	Yes	Yes	Yes	Yes	Yes	30	Owner's expense	Owner's expense	Califood only, vaccine furnished by State. Prac. vet. 75¢ p/h.
Nebraska	Yes	No	Yes	Yes	Yes	Yes	No	No	30	50¢ per head & 6¢ per mile	Included in bleeding & vaccinating on a per hd. basis	30¢ per head & 6¢ per mile
North Dakota	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	30	\$20.00 per day or \$2.50 per hour	\$20.00 per day, or \$2.50 per hour	\$20.00 per day, or \$2.50 per hour
Ohio	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	\$2.00 per herd, 50¢ per head	\$3.50 per herd, 50¢ per head	\$1.50 per head
South Dakota	Yes	No	No	No	Yes	Yes	Yes	Yes	30	Services paid for by owner	\$3.50 for 1st. 5 reactors, 50¢ per hd. for ea. after 5	Services paid for by owner
Wisconsin	Yes	Yes	Yes	Yes	Yes	No	No	No	30	25¢ per head for dairy, 50¢ per head for beef	\$4.00 per herd	\$1.00 per head, vaccine furnished by State
AREA TOTALS												
WESTERN AREA												
Arizona	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	\$3.00 1st. head, 50¢ per head thereafter	\$3.00 1st. head, 50¢ per head thereafter	\$3.00 1st. head, 50¢ per head thereafter
California	No	Yes	No	Yes	Yes	No	No	Yes	30	Owner's expense	Owner's expense	75¢ per head
Colorado	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	30	Owner's expense	Owner's expense	Owner's expense
Idaho	Yes	No	Yes	Yes	Yes	Yes	Yes	No	30	\$2.00 1st. head, graduated scale to \$2.00 for 20 hd.	\$2.50 1st. head, graduated to \$2.00 for 20 head	\$2.00 1st. head, graduated to \$2.00 for 20 head
Montana	No	No	Yes	Yes	Yes	Yes	Yes	Yes	36	\$2.00 1st. head, graduated to \$38.00 per 100 head	\$2.50 1st. head, graduated to \$39.00 for 50 head	\$2.00 1st. head, graduated to \$38.00 per 100 head
Nevada	No	No	Yes	Yes	Yes	Yes	Yes	No	36	\$20.00 per day, 7½¢ per mile	\$8.00 subsistence allowance	Owner's expense
New Mexico	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	36	Owner's expense	Owner's expense	Owner's expense
Oregon	Yes	No	Yes	Yes	Yes	No	Yes	No	30	Varies, depending on county	Comes under fee for testing	Owner's expense
Utah	No	No	Yes	Yes	Yes	No	Yes	No	30	7½¢ ea. for 1st. 5 graduated down to 2¢ for 100 hd.	\$2.00 for 1st. \$1.00 for 2nd., 50¢ for 3rd. 25¢ thereafter	Part of bleeding service charge
Washington	Yes	No	Yes	Yes	Yes	Yes	Yes	No	36	50¢ per head, \$2.00 minimum for 4 head of less	Part of bleeding service charge	50¢ per head, \$2.00 minimum for 4 head of less
Wyoming	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	36	\$20.00 per day and 8¢ per mile	for use of personally-owned automobile.	
Alaska												
Hawaii												
AREA TOTALS												
GRAND TOTALS												





UNITED STATES DEPARTMENT OF AGRICULTURE
 AGRICULTURAL RESEARCH SERVICE
 BUREAU OF ANIMAL INDUSTRY

SUMMARY SHOWING CATTLE TESTED AND CALVES VACCINATED -- STATE-FEDERAL BRUCELLOSIS CONTROL PROGRAM
 July 1, 1952 - June 30, 1953

STATE	Cattle Population	Cattle Tested	Percent	Reactors Found	Percent	Calf Population	Calves Vaccinated	Percent
EASTERN AREA								
Connecticut	151,000	43,228	28.6	372	0.9	32,000	25,579	79.9
Delaware	60,000	19,493	32.5	133	0.7	13,000	7,088	54.5
Maine	179,000	154,396	86.3	1,159	0.8	55,000	9,839	17.9
Maryland	381,000	131,379	34.5	2,613	2.0	91,000	46,538	51.1
Massachusetts	160,000	21,152	13.2	341	1.6	27,000	18,073	66.9
New Hampshire	95,000	119,040	125.3	365	0.3	24,000	12,533	52.2
New Jersey	191,000	125,020	65.5	1,607	1.3	32,000	24,648	77.0
New York	1,865,000	414,061	22.2	9,645	2.3	434,000	309,262	71.3
Pennsylvania	1,406,000	589,360	41.9	7,418	1.3	339,000	146,661	43.3
Rhode Island	24,000	4,849	20.2	10	0.2	4,000	2,646	66.2
Vermont	377,000	63,194	16.8	1,241	2.0	86,000	71,040	82.6
West Virginia	443,000	116,306	26.3	1,024	0.9	122,000	7,634	6.3
Area Totals	5,332,000	1,801,478	33.8	25,928	1.4	1,259,000	681,541	54.1
SOUTHERN AREA								
Alabama	1,191,000	58,691	4.9	2,003	3.4	430,000	50,683	11.8
Arkansas	1,065,000	35,618	3.3	2,992	8.4	353,000	89,853	25.5
Florida	1,167,000	92,903	8.0	2,027	2.2	292,000	32,305	11.1
Georgia	938,000	193,645	20.6	7,995	4.1	365,000	18,618	5.1
Kentucky	1,258,000	60,222	4.8	1,705	2.8	420,000	65,489	15.6
Louisiana	1,362,000	64,615	4.7	6,464	10.0	353,000	64,671	18.3
Mississippi	1,444,000	70,194	5.0	3,095	4.4	396,000	108,327	27.4
North Carolina	668,000	300,989	45.1	2,097	0.7	193,000	2,053	1.1
Oklahoma	2,188,000	69,159	3.2	3,148	4.6	830,000	53,551	6.5
South Carolina	353,000	107,120	30.3	1,285	1.2	100,000	7,952	8.0
Tennessee	1,291,000	36,260	2.8	864	2.4	400,000	108,759	27.2
Texas	6,141,000	73,515	1.5	3,692	3.9	2,276,000	34,020	1.5
Virginia	991,000	155,517	15.7	3,550	2.3	269,000	78,994	29.4
Puerto Rico	289,000 *	71,180	24.6	1,306	1.8	100,000**	10,883	10.9
Area Totals	20,316,000	1,409,628	6.9	42,223	3.0	6,777,000	726,158	10.7
CENTRAL AREA								
Illinois	2,019,000	489,287	24.2	15,742	3.2	1,087,000	178,367	16.4
Indiana	1,231,000	216,892	17.6	7,264	3.3	517,000	46,002	8.4
Iowa	2,745,000	192,027	7.0	9,828	5.1	2,029,000	87,839	0.0
Kansas ***	2,440,000	92,456	3.8	3,704	4.0	1,421,000	48,397	3.4
Michigan	1,395,000	143,185	10.3	4,401	3.1	1,69,000	17,661	3.8
Minnesota	2,357,000	788,585	33.5	16,038	2.0	1,004,000	117,265	11.7
Missouri	2,444,000	90,899	3.7	7,127	7.8	972,000	69,709	7.2
Nebraska ***	2,580,000	52,089	2.0	2,822	5.4	1,500,000	57,155	3.8
North Dakota	1,150,000	272,200	23.7	6,506	2.4	507,000	34,863	6.9
Ohio	1,581,000	240,649	15.2	8,136	3.4	642,000	74,494	11.6
South Dakota	1,833,000	1,904	0.1	59	3.1	953,000	125,140	13.1
Wisconsin	3,258,000	1,324,104	40.6	109,550	8.3	778,000	541,688	69.6
Area Totals	25,030,000	3,904,277	15.6	191,177	4.9	11,909,000	1,398,580	11.7
WESTERN AREA								
Arizona	638,000	23,230	3.6	298	1.3	215,000	11,304	5.3
California	2,190,000	0	0.0	0	0.0	629,000	362,203	57.6
Colorado	1,265,000	138,920	11.0	3,294	2.4	572,000	99,838	17.5
Idaho	723,000	40,548	7.0	1,253	3.1	320,000	104,465	32.6
Montana	1,429,000	95,622	6.7	2,290	2.4	630,000	129,222	20.5
Nevada	426,000	10,093	2.4	196	1.9	144,000	29,697	20.6
New Mexico	868,000	47,429	5.5	320	0.7	320,000	13,850	4.3
Oregon	876,000	280,291	32.0	2,555	0.9	384,000	73,227	19.1
Utah	480,000	58,517	12.2	1,352	2.3	186,000	21,869	11.8
Washington	696,000	170,944	24.6	3,436	2.0	282,000	74,980	26.6
Wyoming	750,000	24,438	3.3	552	2.3	365,000	66,767	18.3
Area Totals	10,341,000	890,032	8.6	15,546	1.7	4,047,000	987,422	24.4
GRAND TOTALS	61,019,000	8,005,445	13.1	274,874	3.4	23,992,000	3,793,701	15.8

1/ Figures from BAE Tables, January 1, 1953 -- Total Cattle Population, less calves and steers.

2/ Figures from BAE Tables, January 1, 1953 -- Total heifer calves and other calves.

* Figure for cattle population for Puerto Rico from Census of Agriculture, 1950 - Territories and Possessions

** Estimated figure.

*** Figures for Kansas and Nebraska furnished by State Officials.

