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STATE DOCUMENTS

OCT 15 1971

Annual Report
of the
**Montana Livestock
Sanitary Board**



to the
Governor of Montana
Honorable Forrest H. Anderson

for the
FISCAL YEAR ENDED

June 30, 1971

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STATE OF MONTANA
LIVESTOCK SANITARY BOARD
Helena, Montana 59601

October 15, 1971

The Honorable Forrest H. Anderson
Governor
State of Montana
Helena, Montana 59601

Dear Governor Anderson:

In accordance with the requirements of Section 32-4002, RCM 1947, there is herewith transmitted to you the report of the Livestock Sanitary Board covering the fiscal year ended June 30, 1971.

Major accomplishments during the year included:

1. Prevented the reintroduction of several livestock diseases that once took a heavy toll of livestock in Montana and were eradicated from the State.
2. Revised the brucellosis eradication program to assure attainment of a Certified Brucellosis-Free State as soon as possible. Fifteen western Montana counties attained that goal during the year.
3. Maintained a dairy and milk inspection program that will permit a report that another year has gone by without a single milk borne disease outbreak in man from milk produced and distributed by licensed Montana dairymen and milk plants.
4. Assisted fifty-six small meat plants in Montana in meeting federal meat inspection standards. All plants having state meat inspection were granted federal meat inspection and now enjoy the same marketing privileges as the large federally inspected plants.
5. Concluded the expensive duplication of maintaining two systems of meat inspection in Montana.
6. Maintained a diagnostic laboratory essential to good disease control and the production of safe milk which was able to double the number of serological tests required by the brucellosis eradication program.

Respectfully submitted,



J. W. SAFFORD, D.V.M.
State Veterinarian & Executive Officer

JWS/jc

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PRINCIPAL OFFICES AND OFFICERS

LIVESTOCK SANITARY BOARD

OFFICER

Term of Office

Home Address

F. T. SAYLOR, Chairman..... Choteau
3/1/67 - 3/1/73

WILFORD F. JOHNSON, Vice-Chairman..... Hall
3/1/67 - 3/1/73

ROBERT G. BARTHELMESS, Member..... Miles City
3/1/71 - 3/1/77

JESS BLANKENSHIP, Member..... Crow Agency
3/1/69 - 3/1/75

THOMAS EVANS, Member..... Stanford
3/1/69 - 3/1/75

ROBERT H. SIMONS, Member..... Turner
3/1/71 - 3/1/77

PRINCIPAL ADMINISTRATIVE OFFICERS

J. W. SAFFORD, D.V.M..... Executive Officer and State Veterinarian

GLENN C. HALVER, D.V.M..... Chief Deputy State Veterinarian;
In Charge, Disease Control Division

BECKWITH HUBBELL, JR., D.V.M..... In Charge, Diagnostic Laboratory Division

HERB BALLOU, M.S..... In Charge, Dairy & Milk Inspection Division

HERBERT A. BROSZ, D.V.M..... In Charge, Meat Inspection Division

PRINCIPAL OFFICES

Livestock Sanitary Board..... Livestock Building, Capitol Grounds, Helena

Diagnostic Laboratory..... Hadleigh Marsh Laboratories,
Montana State University, Bozeman

GENERALLY

Article XII, Section 9 of the Constitution of Montana provides for a special levy on livestock, a source of funding, in part, of the operations of the Livestock Sanitary Board.

The statutes relating to the operations of the Montana Livestock Sanitary Board are contained in the following Sections of the 1947 Revised Codes of Montana: 46-201 through 46-246 (referred to as "Livestock Sanitary Board and State Veterinary Surgeon--Quarantine--Inspection and Destruction of Diseased Stock--Licensing Dairies, Milk Plants and Slaughterhouses"); 46-301 through 46-303 (referred to as "Tuberculin Regulation, Sale and Distribution"); 46-401 through 46-415 (referred to as the "Montana Meat Inspection Law"); 46-902 through 46-903, 46-905 through 46-907, 46-914 through 46-916 and 46-920 through 46-921 (referred to as "Livestock Markets--Inspection and Quarantine--License and Bonding"); 46-2401 through 46-2406 (referred to as "Rendering or Disposal Plants--Licensing--Regulation"); 46-2501 through 46-2515 (referred to as "Artificial Insemination of Animals and Poultry"); 46-2601 through 46-2611 (referred to as "Regulation of Industry Treating or Feeding Garbage to Swine and Other Animals"); 84-5209 through 84-5213 (referred to as "Livestock Taxation"); 84-6012 (referred to as "Livestock Brought Into State--Notice to Assessor"); 94-3559 (referred to as "Diseased Animals"); 94-3593 and 94-3594 (referred to as "Glanders--Animal Having, to be Killed--Using or Exposing Animals with Glanders"); 94-35-172 (referred to as "Sale of Diseased Carcasses Without Inspection Forbidden"); 94-35-189 (referred to as "Moving Diseased Sheep"); 94-35-190 (referred to as "Importing Diseased Cattle Into State"); 94-35-191 (referred to as "Infected Animals--Bringing Into State"); 94-35-192 (referred to as "Receiving or Transporting Diseased Cattle"); 94-35-193 (referred to as "State Veterinary Surgeon--Disobeying Orders Of"); and 94-35-194 (referred to as "Obstructing Veterinary Surgeon, etc.").

PRINCIPAL GOALS

The principal goals of the Montana Livestock Sanitary Board are:

1. Apply the scientific disciplines of veterinary medicine to prevent the devastation and harm to the livestock industry and man that can be caused by uncontrolled diseases of animals.
2. Maintain a safe, wholesome milk and meat food supply.

MAJOR ACCOMPLISHMENTS SUMMARIZED

<u>PRIORITY</u>	<u>DISCRIPTION</u>	<u>PROGRAM</u>
1.	A. Prevented the reintroduction of costly livestock diseases which have been eradicated from Montana.	Disease Control
	B. In advancing toward complete eradication of bovine brucellosis, maintained fifty-six counties as Modified-Certified Brucellosis Areas and attained the goal of "Certified Brucellosis-Free" for fifteen western Montana counties.	"
	C. Maintained Montana as a Modified-Accredited Tuberculosis Area.	"
	D. Maintained all dairy herds producing milk and cream for human consumption completely free of tuberculosis and brucellosis.	"
	E. Maintained Montana as a Hog Cholera-Free State.	"
2.	A. Maintained a level of dairy and milk inspection which resulted in not one single milk-borne disease outbreak in man.	Dairy & Milk Inspection
3.	A. Revised the brucellosis eradication program to assure that Montana will qualify as "Certified Brucellosis-Free" in the near future.	Administration
4.	A. Extended mandatory state meat inspection to a total of fifty-six small, widely distributed establishments.	Meat Inspection
	B. Assisted state-inspected meat plants to qualify for and make the transition to federal meat inspection which provides, according to federal law, a non-restricted market for their meat and meat products.	"
5.	A. Maintained diagnostic laboratory services essential to keeping a healthy livestock industry, to conducting disease control and eradication programs, and assuring consumers a safe milk and meat food supply.	Diagnostic Laboratory

1. Disease Control Program

- A. Through utilization of statutory authority, a full-time veterinary medical staff and the entire veterinary medical profession in Montana, coordinated with disease control efforts throughout the United States, such ruinous diseases as cattle scabies, sheep scabies, hog cholera, Newcastle disease, foot-and-mouth disease, glanders, dourine and anthrax were prevented from being re-introduced or from re-occurring in Montana this past fiscal year. The economic return of raising livestock without these diseases can best be expressed by stating the fact that livestock production with any of these diseases being widespread would be impossible.
- B. Brucellosis, for over fifty years the most costly and persistent disease ever to affect the Montana cattle industry and to jeopardize human health, is almost eradicated. Good progress was made toward the goal of complete freedom from this disease by the application of veterinary medical principles and scientific facts to a long-range, organized control program.
- C. Bovine tuberculosis no longer causes the economic waste to the cattle industry nor the danger to man it once did in Montana. The surveillance and eradication program must be continued to find that last infected animal to prevent the re-establishment of the disease.
- D.
- E. Montana was declared hog cholera-free in 1964. At one time this disease laid waste to as high as eighty herds of swine per year. The swine industry has been free of the ravages of this disease since 1964. The disease still exists in many areas of the United States, therefore, a major effort must be exerted to prevent its re-introduction.

2. Dairy and Milk Inspection Program

- A. In view of the ease with which diseases can be transmitted to man through milk, it is always considered a major accomplishment to see the dairy industry in cooperation with the dairy and milk inspection program of this Department and the U. S. Public Health Service able to report no milk-borne disease outbreaks during the fiscal year. This continued success of well-founded preventative measures has brought consumer confidence in the safety of milk and milk products that yields a great economic return to the dairy industry.

3. Administration Program

- A. The continued evaluation and study of the bovine brucellosis eradication program revealed that for the past four years progress toward eradication had reached a stationary level with indications that, if permitted, the disease would increase and the effort made would just maintain Montana, a cattle exporting state, as a Modified-Certified Brucellosis Area. Many states that received Montana cattle were declared Certified Brucellosis-Free and testing embargoes were being placed on Montana cattle. The Board revised the program which resulted in increased testing of cattle being sold back to Montana ranches to further prevent transmission of the disease, increased the testing of cattle at slaughter establishments and provided for voluntary testing of 10% of the cattle in individual herds.

The results in the first year have advanced fifteen western Montana counties to qualify as Certified Brucellosis-Free and gives every indication that thirty-two more counties will attain this certification by the fall of 1971. The testing program prevented a number of infected cattle from being sold into brucellosis-free herds.

4. Meat Inspection Program

- A. As required by federal law and under a cooperative agreement with the United States Department of Agriculture, Consumer & Marketing Service, mandatory state meat inspection was extended to a total of fifty-six very small, widely dispersed establishments in Montana.
- B. For the past two years every effort was made to bring these very small, widely dispersed meat plants up to federal standards and impose a system of meat inspection equal to federal inspection.

The maintenance of state meat inspection, "equal to" federal inspection, in the fifty-six plants that slaughtered and processed only 10% of animals slaughtered in Montana would cost at least \$7.50 for each animal slaughtered. Nine federally inspected plants operating in Montana slaughtered 90% of the animals in the state. The high volume slaughtered in federally inspected plants resulted in federal meat inspection being maintained in the United States at approximately 50¢ per head.

To maintain state meat inspection in Montana, as required by federal law, resulted in duplication of administrative personnel and procedures, supervisory personnel, training programs, laboratory support, travel and subsistence with that of the federal meat inspection program being maintained in the state, which could not be resolved with the USDA, Consumer & Marketing Service, Meat Inspection Division under the cooperative state-federal agreement.

The 10% of the animals slaughtered in federally-approved state-inspected establishments were restricted, by federal law, from being marketed in "interstate commerce"; whereas, the animals slaughtered under federal meat inspection could be marketed in interstate commerce. The federally-approved state-inspected establishments, eventhough they were required to maintain the same meat inspection standards as federal establishments, were at a distinct marketing disadvantage.

Following a complete review of the state meat inspection program in Montana and after determining that the USDA would be required, by federal law, to maintain state-wide mandatory meat inspection if the state did not, the Forty-Second Legislature did not appropriate any funds to maintain state meat inspection.

On April 28, 1971, all meat inspection was taken over by the federal government in Montana.

All plants that had state meat inspection were granted federal meat inspection, thus, the "pioneering" efforts of the state meat inspection program the past two years to meet federal standards in the small plants yielded good results.

Major Accomplishments Described

The small plants, formerly under state meat inspection and now operating under federal meat inspection, are no longer operating under the marketing disadvantage of not being able to sell their products in interstate commerce.

The unnecessary and very expensive duplication of maintaining two systems of meat inspection within the State no longer exists.

An expenditure of \$150,000 to \$200,000 a year from the General Fund to support state meat inspection that covered only 10% of animals slaughtered in Montana is no longer needed.

5. Diagnostic Laboratory Program

- A. The major accomplishment of the Diagnostic Laboratory was its ability to handle nearly double the number of tests over those conducted the year before. The increase in the number of tests occurred in the serology section, primarily, as a result of the increased brucellosis testing required by the Disease Control Program.

MAJOR RECOMMENDATIONS SUMMARIZED

<u>PRIORITY</u>	<u>RECOMMENDATION</u>	<u>PROGRAM</u>
1.	Apply added emphasis to attain complete bovine brucellosis eradication.	Disease Control
2.	Establish a program to qualify Montana as swine "Validated Brucellosis-Free".	"
3.	Establish a pilot research-control program for anaplasmosis in Montana.	"
4.	Provide air conditioning in the Diagnostic Laboratory building in Bozeman.	Diagnostic Laboratory

1. Apply added emphasis to attain complete bovine brucellosis eradication.

When a disease, after many years effort, has been reduced to such a low level that it no longer causes extensive economic loss nor endangers public health, there is a tendency to eradicate the disease control program before the disease is completely eradicated. The brucellosis eradication is at this point in Montana. Assurances must be made that adequate funds and effort continue to be available to complete the work as soon as possible. This not only avoids larger expenditures of funds later on, but protects the great investment made over many years to control the disease.

2. Establish a program to qualify Montana as swine "Validated Brucellosis-Free".

Surveillance over the past fifteen years would indicate that swine brucellosis does not exist in Montana. Because of the danger of swine brucellosis to man, particularly slaughterhouse workers, and the economic loss sustained in infected herds, California has announced that after January 1, 1973 swine will not be accepted in California for any purpose unless they originate from officially Validated Brucellosis-Free Areas. There are indications that interstate regulations may prohibit swine moving in interstate commerce unless they originate from Validated Brucellosis-Free Areas. The swine industry is a healthy, growing industry in Montana and should not face marketing disadvantages that could result in actions announced by California. It is recommended that program procedures be established as soon as possible to qualify Montana as swine "Validated Brucellosis-Free". With all evidence indicating freedom from the disease, it will be only a matter of conducting sufficient tests to prove freedom from the disease. The program can be accomplished with present field and laboratory staff with funds available to the Disease Control Program.

3. Establish a pilot research-control program for anaplasmosis in Montana.

Sporadically anaplasmosis causes excessive losses to adult cattle in herds located in about 1/3 of the area of Montana. This past year Canada and Wisconsin are requiring negative complement fixation (CF) tests on cattle being shipped to them. A very high percentage of the cattle in the endemic area in Montana will react to the anaplasmosis CF test, are carriers of anaplasmosis and are barred from being sold in Canada, Wisconsin and New York. It is anticipated that other states will place similar embargoes into effect. Montana cattle will have some very definite restrictions placed on their movement and marketability. Because of the anaplasmosis vector-carrier animal interrelationships under Montana environmental conditions, it has never been established that a Montana range herd, once free of anaplasmosis in the endemic area, would remain free. It is recommended that efforts be continued to have the USDA, Animal Disease and Parasite Research Division, in conjunction with other anaplasmosis research-control projects in the United States, establish a pilot research-control project in Montana.

4. Provide air conditioning in the Diagnostic Laboratory building in Bozeman.

Insufficient funds when building the laboratory prevented the inclusion of air conditioning in the laboratory building, although the building was designed to be operated with an air conditioning unit. Lack of air conditioning has been

almost intolerable and, in some areas, has led to the impossibility of conducting some bacteriological work, such as setting up agar plates. Employees have been coming to work early in the morning and leaving in the early afternoon to avoid the heat during about 4 to 6 months of the year. We would recommend that approximately \$50,000 be made available to procure and install the air conditioning unit. Thirty-seven percent of the cost should be borne by the Livestock Sanitary Board and sixty-three percent by the Montana Veterinary Research Laboratory, Montana State University, Bozeman.

PROGRAM DESCRIPTIONS

PROGRAM -- ADMINISTRATION

GOALS AND OBJECTIVES

The goals and objectives of the Administration Program are to implement, incorporate and integrate the requirements of laws and regulations, through directives and orders of the Board and State Veterinarian, into efficient performance of the interrelated functions of (1) the animal Disease Control Program, (2) Dairy and Milk Inspection Program, (3) Meat Inspection Program and (4) the Diagnostic Laboratory Program.

ACHIEVEMENTS

Assisted the Board to remain aware of new and changing federal and state laws, rules and regulations in order to make expedient and necessary application and adjustments to specific programs.

Maintained state-wide, national and international disease surveillance permitting prompt action in prevention of the introduction of dangerous animal diseases and to maintain an emergency disease control organization on an alert status prepared to take proper and decisive action to circumscribe and extirpate a disease that could be introduced.

Administration provided the other four Programs freedom to pursue their primary objectives by maintaining all temporary and permanent records, including, but not limited to, payroll, preparation of budgets, control of expenditures of budgeted funds, fiscal reports required by state and federal laws and agencies, personnel hiring, placement and management, and all business office operations.

Upon verifying compliance with laws and regulations, this Program issued licenses and permits to dairies, milk plants, milk distributors, artificial inseminators, breeding services, meat depots, meat packing houses, slaughterhouses, rendering plants, poultry shippers and garbage cooking establishments.

PERFORMANCE INDICATORS

..... FISCAL YEAR.....

	1968-69	1969-70	1970-71
Cost.....	\$61,908	\$65,894	\$74,934
Performance:			
Board meetings.....	5	5	7
Regulations adopted, revised, rescinded.....	1	9	9
Licenses and permits issued.....	1,689	1,634	1,961

*See "Appendix A" in "Detailed Review of Programs".

PROGRAM -- DIAGNOSTIC LABORATORY

GOALS AND OBJECTIVES

The goals and objectives of the Diagnostic Laboratory Program are to furnish essential laboratory support vital to the successful function of the Disease Control Program, Dairy and Milk Inspection Program and the Meat Inspection Program. It is the goal and objectives within the Diagnostic Laboratory Program to always maintain and utilize scientifically valid testing and diagnostic procedures and to incorporate, as needed, all new scientific developments in each of the following disciplines: virology, bacteriology, pathology, parasitology, serology, chemistry, toxicology, necropsy and media preparation.

*ACHIEVEMENTS

The Diagnostic Laboratory continued to provide indispensable scientific diagnostic support to the Disease Control, Dairy and Milk Inspection and Meat Inspection Programs, the livestock industry and the veterinary medical profession of Montana with an increase from 110,694 tests and analyses performed in fiscal year 1969-70 to 225,662 tests and analyses performed in fiscal year 1970-71.

The Diagnostic Laboratory maintained U. S. Public Health Service approval of the milk and milk products testing laboratory.

Newer scientific techniques were incorporated into the services provided by the Diagnostic Laboratory staff as skills, training and equipment were acquired.

PERFORMANCE INDICATORS

..... FISCAL YEAR.....

1968-69 1969-70 1970-71

Cost.....	\$122,248	\$128,867	\$136,315
Performance:			
Number of autopsies.....	948	1,016	953
Number of bacteriology, pathology, parasitology and virology tests.....	4,773	9,376	9,354
Number of milk and milk products tests.....	26,406	25,335	24,269
Number of chemical tests.....	2,401	2,671	3,836
Number of serological tests.....	61,078	72,296	187,238

*See "Appendix B" in "Detailed Review of Programs".

PROGRAM -- DISEASE CONTROL

GOALS AND OBJECTIVES

The goal and objectives of the Disease Control Program are to safeguard the health of approximately 6 million head of Montana livestock and poultry from the introduction of infectious and contagious diseases; to control, and if possible, eradicate diseases of animals endemic in Montana; and prevent the transmission of diseases of animals to man.

*ACHIEVEMENTS

Revisions of the long-range brucellosis eradication program were activated to assure increased vigilance in locating the very few remaining infected herds, to increase protection against reintroduction and spread and to move Montana from a Modified Certified Brucellosis Area to a Certified Brucellosis-Free State. The results obtained have, by the end of the fiscal year, qualified fifteen western Montana counties as Certified Brucellosis-Free. Indications are that about thirty-two more counties will soon qualify.

All indications are that Montana swine are free of brucellosis. The proposal of states to not accept swine from other than officially Validated Brucellosis-Free swine states and areas has been reviewed with representatives of the Montana swine industry. They are requesting that a swine testing program be inaugurated to establish Montana as officially validated free of swine brucellosis.

The continuous efforts to prevent the reintroduction and reoccurrence of several animal diseases, which once caused great economic loss and endangered public health in Montana, were successful. Such diseases as cattle scabies, sheep scabies, hog cholera, foot-and-mouth disease, glanders, dourine, anthrax and Newcastle disease, each, at one time, a major control and eradication program in Montana, were not present. Continued freedom from these diseases brings an economic return that can't be measured.

Tuberculosis and brucellosis has been further reduced to a point that it is possible through continued application of the scientifically oriented eradication program, to completely eliminate these two once very costly diseases in the near future.

The application of a skunk reduction program around areas in which laboratory confirmed rabies infected animals are found appears to be maintaining wildlife rabies incidence to a very low level. Since the first report of rabies in skunks in Montana in 1964, with the application of the skunk reduction program, no cases of canine rabies or rabies in man has been reported.

The application of the present control program of infectious foot-rot in sheep in western Montana and lice in sheep in eastern Montana is just controlling the two diseases. The establishment of a systematic area inspection and mandatory treatment program would, in a very few years, eradicate these two problems.

The pullorum testing program conducted this year reveals that all poultry breeding

*See "Appendix C" in "Detailed Review of Programs".

Program Descriptions

flocks remain free of this disease which at one time was very costly to poultrymen and hatcherymen alike.

The application of a mastitis control program in dairy herds with cooperative dairymen continues to yield great economic returns to the dairyman through increased milk production and avoids the unnecessary loss sustained when abnormal milk, which includes milk from diseased udders, is prohibited from being sold for human consumption.

<u>PERFORMANCE INDICATORS</u> FISCAL YEAR.....		
	1968-69	1969-70	1970-71
Cost.....	\$113,527	\$112,422	\$181,479
Performance:			
Animals inspected and/or tested.....	3,008,356	2,843,799	2,749,667
Animals imported.....	276,953	247,727	239,432
Number of animal diseases reported.....	75	74	71
Number of animals affected.....	36,560	37,267	40,744
Number of counties maintained as Modified Certified Brucellosis Areas.....	56	56	56
Number of counties declared as Certified Brucellosis-Free.....	-0-	-0-	15
Number of counties maintained as Modified-Accredited Tuberculosis Areas.....	56	56	56
Number of counties maintained as Hog Cholera-Free.....	56	56	56
Number of brucellosis quarantined herds on June 30th.....	9	13	11
Number of cattle brucellosis tested.....	128,343	163,570	242,890
Number of brucellosis reactors.....	341	507	451
Number of Validated Brucellosis-Free swine herds	15	15	19
Number of cattle tested for tuberculosis.....	16,809	23,122	21,743
Number of cattle tuberculosis reactors.....	1	-0-	1

PROGRAM -- DAIRY AND MILK INSPECTION

GOALS AND OBJECTIVES

The goal and objectives of the Dairy and Milk Inspection Program are:

1. Assist the dairymen to maintain disease-free dairy herds.
2. Assure Montana milk consumers a safe, wholesome fluid milk supply.
3. Maintain sanitation and facility standards acceptable to U. S. Public Health Service to assure acceptance of Montana produced and processed milk into interstate commerce.

*ACHIEVEMENTS

1. Not one single milk-borne disease outbreak from the consumption of milk or cream from Grade A licensed dairies or milk plants in Montana were reported this year.
2. All licensed milk plants and their dairy producers maintained acceptable sanitation and facility standards of the U. S. Public Health Service.
3. All licensed Grade A dairy herds remained free of tuberculosis and brucellosis. Mastitis did become a problem in a relatively few dairies, but active participation in a mastitis control program, in most instances, alleviated the problem.

PERFORMANCE INDICATORS

..... FISCAL YEAR.....

	1968-69	1969-70	1970-71
Cost.....	\$49,609	\$51,293	\$54,546
Performance:			
Licensed retail raw dairies.....	9	9	8
Pounds of raw milk sold daily.....	3,510	4,955	2,650
Licensed milk plants.....	24	24	25
Pounds of pasteurized milk sold daily.....	629,690	624,640	675,040
Licensed plant-producer dairies.....	382	347	338
Total official inspections and laboratory tests.....	32,964	29,425	30,957

*See "Appendix D" in "Detailed Review of Programs".

PROGRAM -- MEAT INSPECTION

GOALS AND OBJECTIVES

The goal and objective of the Meat Inspection Program is to furnish and enforce a mandatory meat inspection program to very small, widely dispersed slaughtering and processing establishments that only slaughter and process 10% of the off-farm slaughtered animals in Montana (the amount not slaughtered and processed under federal meat inspection) that would be determined to be "equal to" the federal meat inspection by the U. S. Department of Agriculture, Consumer and Marketing Service as required by the "Wholesome Meat Act of 1967", Public Law 90-201.

*ACHIEVEMENTS

Official state meat inspection was maintained in fifty-six small establishments located throughout Montana. Federal law requires that meat and meat products in interstate commerce be slaughtered under federal meat inspection. During the fiscal year 90% of the animals slaughtered for human consumption in Montana were slaughtered and processed in nine federally inspected establishments in the state and only 10% were slaughtered and processed in fifty-six state-inspected establishments.

Federal law prohibits the interstate marketing of meat and meat products slaughtered and processed under state meat inspection eventhough the state meat inspection and the plant is USDA-certified as having meat inspection "equal to" federal inspection. Since state-inspected plants are required by federal law to maintain federal standards, surveys revealed that several plants, under Montana inspection, intended to apply for federal meat inspection to avoid the marketing limitation of their products imposed by federal law because they operated under USDA-approved state meat inspection. This would result in continual reduction of need for a state meat inspection program.

The maintenance of a USDA-approved state meat inspection program in Montana (as required by the Wholesome Meat Act of 1967) resulted in a duplication of administration, supervision, laboratory support, travel and training programs with that of the federal meat inspection program maintained in Montana. Means could not be found under the cooperative federal-state meat inspection agreement nor with federal meat inspection policies to maintain a state meat inspection program to avoid such expensive duplication.

The very low volume slaughtered and processed in state inspected plants would result in the cost of maintaining federally-approved state meat inspection to amount to \$7.50 per head. Federal meat inspection is maintained on the national level (which includes all high volume plants) at a cost of approximately 50¢ per head.

All appropriations to fund state meat inspection for the next biennium were eliminated in all appropriation bills introduced in the House during the Regular and Extraordinary Sessions of the Forty-Second Legislature. Funds were not restored by any amendments originating in the House or the Senate.

*See "Appendix E" in "Detailed Review of Programs".

Program Descriptions

In accordance with the authority granted under Public Law 90-201, the USDA, Consumer and Marketing Service, Meat Inspection Division must enforce and maintain meat inspection in states which do not maintain a state-wide, mandatory meat inspection program. On April 28, 1971 the USDA, Consumer and Marketing Service took over the entire meat inspection program in Montana.

<u>PERFORMANCE INDICATORS</u> FISCAL YEAR.....		
	1968-69	1969-70	1970-71
Cost.....	\$142,712	\$221,692	\$232,269
Performance:			
Number of establishments under state inspection.....	29	54	56
Number of animals slaughtered under state inspection.....	53,528	51,532	52,761
Number of animals condemned.....	127	108	77
Pounds of meat processed under inspection..	8,279,725	18,295,945	17,565,196
Number of official plant inspections.....	225	321	339

PROGRAM COST SUMMARY

<u>PROGRAM</u> FISCAL YEAR COSTS.....		
	<u>1970-71</u>	<u>1969-70</u>	Increase (Decrease)
Administration.....	\$ 74,934	\$ 65,894	\$ 9,040
Diagnostic Laboratory.....	136,315	128,867	7,448
Disease Control.....	181,479	112,422	69,057
Dairy and Milk Inspection.....	54,546	51,293	3,253
Meat Inspection.....	<u>232,269</u>	<u>221,692</u>	<u>10,577</u>
TOTAL.....	<u>\$ 679,543</u>	<u>\$ 580,168</u>	<u>\$ 99,375</u>

PROGRAM COST DETAIL

<u>PROGRAM</u>	<u>1970-71FY TOTAL</u>	<u>PERSONAL SERVICES</u>	<u>OPERATING EXPENSES</u>	<u>CAPITAL</u>	<u>GRANTS & BENEFITS</u>
Administration.....	\$ 74,934	\$ 48,635	\$ 15,758	\$ 543	\$ 10,000
Diagnostic Laboratory.....	136,315	102,785	27,644	5,886	-0-
Disease Control.....	181,479	158,478	18,120	4,813	68
Dairy and Milk Inspection...	54,546	42,402	12,144	-0-	-0-
Meat Inspection.....	<u>232,269</u>	<u>202,518</u>	<u>29,751</u>	<u>-0-</u>	<u>-0-</u>
TOTAL.....	<u>\$679,543</u>	<u>\$554,818</u>	<u>\$103,415</u>	<u>\$ 11,242</u>	<u>\$ 10,068</u>

SOURCE OF FUNDING

General Fund.....	\$356,554
Marked Revenue Fund	
Livestock Sanitary Board Account.....	192,673
Federal & Private Revenue Fund	
Livestock Sanitary Board Account.....	<u>130,316</u>
TOTAL.....	<u>\$679,543</u>

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TABLE I

MONTANA LIVESTOCK SANITARY BOARD MEETINGS

July 13 and 14, 1970.....	Helena
August 17, 1970.....	Kalispell
October 11, 1970.....	Billings
December 8, 1970.....	Billings
January 18 and 19, 1971.....	Helena
March 5 and 6, 1971.....	Helena
May 19, 20 and 21, 1971.....	Billings

TABLE II

REGULATIONS ADOPTED, REVISED AND RESCINDED

Adopted:

Chapter 22, Regulations 2201 through 2205, "Identification for Intrastate Movement of Cattle"; effective May 21, 1971.

Revised:

Regulation 307, "Breeding Animals Sold, Offered for Sale, or Presented for Show and Exhibition to be Free of Brucellosis"; effective September 1, 1970 and October 11, 1970.

Regulation 301, H, 1 - Brucellosis definitions; effective September 1, 1970.

Regulation 309, G, 2a and 309, G, 3a - Certified Brucellosis-Free Bovine Herds; effective September 1, 1970.

Regulation 1515, I, B and C, and 1515, II, B - Importation of Cattle; effective September 17, 1971.

Regulation 3804, Approved Course in Artificial Insemination; effective March 6, 1971.

Regulation 3805, Examination for a License; effective March 6, 1971.

Regulation 1515, Importation of Cattle; effective May 21, 1971.

Rescinded:

Regulation 307, Paragraph B, Parts 1 through 7, "Breeding Animals Sold, Offered for Sale or Presented for Show and Exhibition to be Free of Brucellosis"; effective March 7, 1971.

TABLE III

LICENSES AND PERMITS ISSUED

Licenses

Artificial Inseminators.....	482
Dairies:	
Producer.....	338
Retail Raw.....	8
Garbage Feeding.....	6
Meat Depots.....	6
Meat Packing Houses.....	79
Milk Plants.....	25
Rendering Plants.....	5
Slaughterhouses.....	<u>52</u>
 Total Licenses Issued.....	 <u>1,001</u>

Permits

Milk Distributors.....	118
Poultry Shipping (Chicks and hatching eggs).....	50
Semen for Artificial Insemination.....	<u>792</u>
 Total Permits Issued.....	 <u>960</u>
 <u>TOTAL LICENSES AND PERMITS ISSUED.....</u>	 <u>1,961</u>

*License fees collected are submitted to the State of Montana General Fund.

TABLE I

SUMMARY OF LABORATORY TESTS BY TYPE OF TEST

<u>TYPE OF TEST</u>	<u>NUMBER</u>
Autopsies.....	953
<u>*Bacteriology & Chemical Tests on Milk and Milk Products</u>	
In compliance.....	18,792
Not in compliance.....	<u>1,240</u>
Total.....	20,032
<u>Bacteriology, Parasitology, Pathology and Virology:</u>	
Positive.....	5,286
Negative.....	2,815
Inconclusive.....	<u>1,265</u>
Total.....	9,366
<u>Chemical:</u>	
Blood.....	1,055
Drug detection on race horses.....	519
Meat.....	1,236
Nitrate.....	136
Pesticide residue.....	205
Toxicology.....	532
Water.....	151
Miscellaneous.....	<u>2</u>
Total.....	3,836
<u>Serology (Excluding Card & Field Tests).....</u>	<u>142,456</u>
SUB-TOTAL.....	176,643
 P L U S :	
<u>Serology - Card & Field Tests:</u>	
Brucellosis tests - Cattle.....	41,847
Brucellosis tests - Swine.....	1,397
Pullorum tests - Chickens.....	<u>5,775</u>
SUB-TOTAL.....	<u>49,019</u>
<u>TOTAL LABORATORY TESTS BY TYPE OF TEST.....</u>	<u>225,662</u>

*Includes Wisconsin Mastitis tests.

TABLE II

SUMMARY OF LABORATORY TESTS BY SPECIE, PRODUCT OR MATERIAL

<u>SPECIE, PRODUCT OR MATERIAL</u>	<u>NUMBER</u>	<u>PERCENT</u>
Cattle.....	187,111.....	82.92
Milk and milk products.....	24,269.....	10.75
Chickens.....	5,927.....	2.63
Swine.....	3,215.....	1.42
Meat and meat products.....	1,236.....	.55
Horses.....	858.....	.38
Dogs.....	675.....	.30
Sheep.....	358.....	.16
Meat meal.....	351.....	.16
Cats.....	315.....	.14
Water.....	164.....	.07
Deer.....	118.....	.05
Skunks.....	70.....	.03
Rabbits.....	47.....	.02
Bats.....	43.....	.02
Mice.....	39.....	.02
Ducks.....	36.....	.02
Goats.....	30.....	.01
Bears.....	26.....	.01
Buffalo.....	24.....	.01
Chinchillas.....	20.....	.01
Rats.....	18.....	
Raccoons.....	16.....	
Guinea pigs.....	15.....	
Gerbils.....	14.....	
Coyotes.....	13.....	
Geese.....	13.....	
Squirrels.....	11.....	
Mink.....	10.....	
Hamsters.....	8.....	
Muskrats.....	8.....	
Foxes.....	8.....	
Gophers.....	7.....	
Badgers.....	6.....	
Grouse.....	5.....	
Peacocks.....	5.....	
Weasels.....	5.....	
Mountain sheep.....	4.....	
Moles.....	3.....	
Monkeys.....	3.....	
Miscellaneous.....	558.....	
<u>TOTAL LABORATORY TESTS</u> <u>BY SPECIE, PRODUCT OR MATERIAL.....</u>	<u>225,662.....</u>	<u>100.00</u>

TABLE III

AUTOPSIES PERFORMED REPORT

<u>SPECIE</u>	<u>NUMBER</u>	<u>SPECIE</u>	<u>NUMBER</u>
Badgers.....	5	Pheasants.....	2
Bats.....	19	Pigeon.....	1
Bears.....	1	Rabbits.....	15
Boldest.....	1	Raccoons.....	8
Bats.....	60	Rats.....	9
Cattle.....	119	Sheep.....	58
Chickens.....	65	Skunks.....	34
Chinchillas.....	5	Squirrels.....	5
Chipmunks.....	3	Swine.....	226
Coyotes.....	6	Weasels.....	3
Crow.....	1		
Deer.....	2	TOTAL AUTOPSIES PERFORMED.....	953
Dogs.....	46		
Ducks.....	18		
<u>Fetuses:</u>			
Bovine.....	175		
Equine.....	1		
Cvins.....	1		
Foxes.....	4		
Geese.....	3		
Gerbils.....	2		
Gophers.....	4		
Grizzly bear.....	1		
Grouse.....	2		
Guinea pigs.....	5		
Hampsters.....	8		
Mice.....	3		
Mice.....	19		
Mink.....	3		
Mole.....	1		
Monkey.....	1		
Muskrats.....	4		
Parakeets.....	2		
Peacocks.....	2		

TABLE IV

BACTERIOLOGY AND CHEMICAL TESTS ON MILK AND MILK PRODUCTS

<u>TYPE OF TEST</u>	<u>IN COMPLIANCE</u>	<u>NOT IN COMPLIANCE</u>
<u>BACTERIOLOGY TESTS</u>		
<u>Buttermilk:</u>		
Antibiotic detection tests.....	134	
Coliform counts.....	122	12
<u>Cottage Cheese:</u>		
Antibiotic detection tests.....	40	
Coliform counts.....	33	7
<u>Cream:</u>		
Antibiotic detection tests.....	430	
Bacterial counts.....	397	29
Brucella abortus ring tests.....	3	
Coliform counts.....	617	14
<u>Eggnog:</u>		
Antibiotic detection tests.....	2	
Bacterial counts.....	2	
Coliform counts.....	1	1
<u>Milk:</u>		
Antibiotic detection tests.....	3,787	6
Bacterial counts.....	3,525	226
Brucella abortus ring tests.....	2,641	
Coliform counts.....	3,302	575
<u>Yogurt & Miscellaneous (Water & Swab):</u>		
Antibiotic detection tests.....	3	
Bacterial counts.....	3	
Coliform counts.....	4	
TOTAL BACTERIOLOGY TESTS.....	14,876	899
<u>CHEMICAL TESTS</u>		
<u>Buttermilk:</u>		
Cottage Cheese.....	132	2
<u>Cream:</u>		
.....	60	
.....	673	19

Table iv (Continued)
Bacteriology and Chemical Tests on Milk and Milk Products (Continued)

TYPE OF TEST	IN COMPLIANCE	NOT IN COMPLIANCE
<u>Chemical Tests (Continued)</u>		
Eggnog.....	2	
<u>Milk:</u>		
General chemical.....	1,127	122
*Wisconsin Mastitis tests.....	2,233	218
Yogurt.....	2	
TOTAL CHEMICAL TESTS.....	3,946	360
TOTAL BACTERIOLOGY AND CHEMICAL TESTS ON MILK AND MILK PRODUCTS.....	18,792	1,240

Values in mms.....	5	10	15	16	17	18	19	20	21	22	23	24	25	30
Samples tested.....	383	774	605	99	166	109	97	61	36	25	27	22	35	12

*

Table v (Continued)

Bacteriology, Parasitology, Pathology and Virology Report (Continued)

FINDING	SPECIMEN AND NUMBER													MISCELLANEOUS Specimen No.					
	BAT	CAT	CATTLE	CHICKEN	CHINCHILLA	DEER	DOG	ELK	HAMSTER	HORSE	MEAT	MEAT MEAL	MILK		RABBIT	SHEEP	SKUNK	SWINE	WATER
<u>Positive</u>																			
Calcium salts.....																			
Cancer eye.....							1												
<u>Candida albicans</u>							2										1		
" <u>guilliermondi</u>																	1		
" <u>parapsilosis</u>			3						1										
" <u>sp</u>			14	1		2		2	2					1		4			
<u>Capillaria sp</u>			1																
<u>Carcinoma</u>	1					2											1		
" , squamous cell.			1			2			1										
" , stomach.....						1													
<u>Cellulomonas acidula</u>																			
<u>Cerebellar hypoplasia</u>	1																		
" malacia.....																			
<u>Choriomeningitis</u>															1				
<u>Circulatory failure</u>			1																
<u>Citrobacter sp</u>				1						1							3		
<u>Cladosporium sp</u>												2					1		
<u>Cleft palate</u>																			
<u>Clostridium bifermentans</u> .			2																
" <u>capitovale</u>			4															1	
" <u>chauvoei</u>			15														1		
" <u>fallax</u>			2																
" <u>fiabelliferum</u>			2																
" <u>hemolyticum</u> ..			6																
" <u>innocuum</u>			1																
" <u>lentoputrescens</u>			1																
" <u>novyi</u>																			1
" <u>pasteurianum</u> ...			2																
" <u>perfringens</u>			95												3				1

Table v (Continued)

Bacteriology, Parasitology, Pathology and Virology Report (Continued)

FINDING	SPECIMEN AND NUMBER														MISCELLANEOUS Specimen No.				
	BAT	CAT	CATTLE	CHICKEN	CHINCHILLA	DEER	DOG	ELK	HAMSTER	HORSE	MEAT	MEAT MEAL	MILK	RABBIT		SHEEP	SKUNK	SWINE	WATER
<u>Positive</u>																			
<u>Clostridium perfringens</u> , Type C.....			8												1				
Type E.....			1												1				
<u>Clostridium rods</u>			1												1				
<u>septicum</u>			7												1				
<u>sordelli</u>			24												1				
sp.....			2												1				
<u>sphenoides</u> ...			1																
<u>tertium</u>			2																
<u>tetanomorphum</u>			2		1														
<u>Cnemidocoptes mutans</u>																			
<u>Coccidia oocysts</u>																			
" sp.....			1																Goose
<u>Coccus sp</u>			1																
<u>Coliforms</u>																			
<u>Complete blood count</u>		29	11			67			21				1		2	1	9	2	
<u>Congenital hypomyelino-</u> <u>genesis</u>			1																
<u>Congestion, lung</u>																			
<u>Conium maculatum</u>																			
<u>Conjunctivitis</u>	1																		
<u>Corynebacterium acnes</u>																			
" <u>agropyri</u> .			1											1			1		
" <u>avidum</u>																	1		
" <u>bovis</u>			19	1													1		
" <u>enzymicum</u>			2														12		
" <u>equi</u>			2														3		
" <u>hemolyticum</u>			2														5		
" <u>hoagii</u>			1														2		

Table v (Continued)

Bacteriology, Parasitology, Pathology and Virology Report (Continued)

FINDING	SPECIMEN AND NUMBER													MISCELLANEOUS									
	BAT	CAT	CATTLE	CHICKEN	CHINCHILLA	DEER	DOG	ELK	HAMSTER	HORSE	MEAT	MEAT MEAL	MILK	RABBIT	SHEEP	SKUNK	SWINE	WATER	Specimen	No.			
<u>Corynebacterium hofmanni</u>			1														1						
" <u>kutscheri</u>																							
" <u>murisepticum</u>	1	3							1					1			1						
" <u>paurometabolum</u>			1																			Duck	
" <u>phocae</u>			2																				
<u>Corynebacterium pseudo-</u>																							
<u>diphtheriticum</u>			4						1								5						
<u>Corynebacterium pseudo-</u>																							
<u>tuberculosis</u>			2														1						
<u>Corynebacterium pyogenes</u>																	7						
" <u>renale</u>			3												2		3						
" <u>suis</u>			1																				
" <u>sp</u>			20											1	3		1						
" <u>striatum</u>			4														3						
" "																							
" <u>ulcerans</u>			1																				
<u>Cryptococcus neoformans</u> ..		1																					
<u>Cystadenoma</u>							1																
<u>Cyst, epidermal</u>							7																
" , tapeworm.....						1																	
<u>Cysticercus tenuicollis</u> ..						1																	
<u>Damalina ovis</u>															5								
<u>Dermacenter albipictus</u> ...										1													
<u>Dermatitis</u>			2																				
<u>Dermatobia hominis</u>		1																					
<u>Dietetica hepatica</u>																							
<u>Differential blood count</u>	18	9					34		10								1						
<u>Distemper</u>	1						7																
<u>Dysentery</u>																	4						

Table v (Continued)

Bacteriology, Parasitology, Pathology and Virology Report (Continued)

Positive	BAT	CAT	CATTLE	CHICKEN	CHINCHILLA	DEER	DOG	ELK	HAMSTER	HORSE	MEAT	MEAT MEAL	MILK	RABBIT	SHEEP	SKUNK	SWINE	WATER	MISCELLANEOUS	No.	
																			Specimen	No.	
<u>Helminthosporium</u> sp.....			1																		
Hematocrit.....	16	10				33				10						1	3				
Hemoglobin.....	16	10				33				10						1	1				
Hemorrhage.....			2	1											1				Bird	1	
" , cerebral.....	1	1															1				
" , intra-alveolar						1															
Hepatitis.....		2																			
Hepatitis dietetica.....																	1				
Herniaphroditism.....						1															
Hernia.....																					
Heterakis sp.....																	1				
Histiocytoma.....							6												Goose	1	
Histoplasma sp.....										1											
Hodgkin's Disease.....																					
Hookworms.....							1														
Homodendrum sp.....	1																				
Hydronephrosis.....							1														
Hyperkeratosis.....							1														
Hypopion.....																					
Infectious bovine rhino- tracheitis.....		41																			
Infectious hepatitis.....																					
Inflammation.....																					
Isospora sp.....										3											
Jejunum, obstruction of..		1																			
Kidney failure.....																					
<u>Lactobacillus acidophilus</u>		1																			
" casei.....		1																			
" sp.....		33					2														
" ".....										4											
" ".....															3		11	1	Bottle	1	
" ".....																				Buttermilk	1

Table v (Continued)

Bacteriology, Parasitology, Pathology and Virology Report (Continued)

FINDING	SPECIMEN AND NUMBER														MISCELLANEOUS Specimen No.				
	BAT	CAT	CATTLE	CHICKEN	CHINCHILLA	DEER	DOG	ELK	HAMSTER	HORSE	MEAT	MEAT MEAL	MILK	RABBIT		SHEEP	SKUNK	SWINE	WATER
<u>Positive</u>																			
Meningoencephalitis, bacterial.....			1							1									
suppurative.....			1																
Mesothelioma.....			1																
<u>Microbacterium flavum</u>							1												Duck
" <u>lacticum</u>																			
<u>Microsporium</u> sp.....			1																
Mold.....			14														2		
<u>Moniezia benedeni</u>			4																
" sp.....			28												3				
<u>Monilia</u> sp.....							1												
<u>Mucor</u> sp.....			3				1			3							3		Corn
Mucosal disease.....			1														1		
Mulberry heart disease...																			
<u>Mycobacterium</u> sp.....																			
<u>Mycocardial</u> degeneration..																			
Necrosis.....			10				1										6		
<u>Nematodirus</u> sp.....			51				2												
<u>Neoplasm</u>			1																
Nephritis.....			1				1										1		
Nephrosis.....			2				1										3		
Neurofibroma.....																			
Neutrophils, periportal infiltration.....																			
<u>Nocardia</u> sp.....			1												1				
"			30							3					1		3		Monkey
Nutritional deficiency...																			
Osteomyelitis.....															1		1		Mt. sheep
Osteoporosis.....			1											1					

Table v (Continued)

Bacteriology, Parasitology, Pathology and Virology Report (Continued)

FINDING	SPECIMEN AND NUMBER														MISCELLANEOUS						
	BAT	CAT	CATTLE	CHICKEN	CHINCHILLA	DEER	DOG	ELK	HAMSTER	HORSE	MEAT	MEAT MEAL	MILK	RABBIT	SHEEP	SKUNK	SWINE	WATER	Specimen	No.	
Positive																					
Pregnancy disease.....			20	6	3		5					3		3	1		50		Goose	1	
<u>Proteus mirabilis</u>																			Mallard	1	
" "																			Peacock	1	
" "																			Rat	1	
" <u>morganii</u>			2							1							5				
" <u>rettgeri</u>			2								1						4		Guinea pig	1	
" sp.....			1								37						28		Mallard	1	
" <u>vulgaris</u>			15														1				
<u>Providence sp, Group A</u>																	2				
" "																	2				
" "			1														2				
Pseudohermophroditism....							1														
<u>Pseudomonas aeruginosa</u> ...			3				1														
" <u>pulida</u>							1										1				
" <u>reptilivorous</u>			1																		
" sp.....			13														5				
Pulmonary edema.....			2																		
" emphysema.....			1				1														
" neoplasm.....																					
" phycomycosis.....			1																Rat	1	
Pyometra.....																					
Rabies.....	1																1				
Red blood count.....		8	3				25														
<u>Rhizopus niger</u> sp.										3									Hair	1	
" sp.....			1																		
Ricketts.....																					
Rumen, ruptured.....																				Guinea pig	1

Table v (Continued)

Bacteriology, Parasitology, Pathology and Virology Report (Continued)

FINDING	SPECIMEN AND NUMBER														MISCELLANEOUS					
	BAT	CAT	CATTLE	CHICKEN	CHINCHILLA	DEER	DOG	ELK	HAMSTER	HORSE	MEAT	MEAT MEAL	MILK	RABBIT	SHEEP	SKUNK	SWINE	WATER	Specimen	No.
Positive																			Duck	2
<i>Sarcocystic rileyi</i>												1								
<i>Salmonella arizona</i>												1								
" <i>binza</i>												1								
" <i>heidelberg</i>												1					1			
" <i>newport</i>																				
" <i>montevideo</i>												2								
" <i>sp.</i>			1							2	4									
" <i>tennessee</i>																				
" <i>typhimurium</i>			5							1										1
<i>Sarcina sp.</i>																				
<i>Sarcoid</i>										3					1					
<i>Sarcoma, malignant</i>																				
" , <i>osteogenic</i>																				
<i>Sarcosporidiosis</i>			1																	
<i>Scopulariopsis brevicaulis</i>			1																	
" <i>sp.</i>			1																	
<i>Scours</i>			1																	
<i>Septicemia, bacterial</i>			1																	
" , <i>neonatal</i>			1																	
<i>Spleen, congestion of</i>																				
<i>Spinal cord, severed</i>																				
<i>Staphylococcus aureus</i>		11	599	3	1		21		2	19				2	9		117		Antelope	1
"																			Duck	6
"																			Goose	2
"																			Guinea pig	1
"																			link	2
"																			Monkey	1
"																			Mouse	1

Table v (Continued)

Bacteriology, Parasitology, Pathology and Virology Report (Continued)

FINDING	SPECIMEN AND NUMBER													MISCELLANEOUS							
	BAT	CAT	CATTLE	CHICKEN	CHINCHILLA	DEER	DOG	ELK	HAMSTER	HORSE	MEAT	MEAT MEAL	MILK	RABBIT	SHEEP	SKUNK	SWINE	WATER	Specimen	No.	
<u>Positive</u>																					
Western equine encephalitis.....									1												
White blood count.....	16	10				32			9						1	2					
Worms.....		4												1							
" , blood.....		4							1									Water trough		1	
" , mature.....		4																			
Yeast.....																					
TOTAL POSITIVE FINDINGS..	1	152	3244	46	11	3	420	2	4	233	1	61	1	22	132	7	775	8	Various		93

NEGATIVE

Acid-fast bacilli.....	1	2	5																		1	
Actinomyces sp.....							1															
Anaplasma sp.....		3														28						
Atrophic rhinitis.....																						
Bacillus anthracis.....		1																				
Bluetongue.....		3																				
Bovine virus diarrhea.....		232																				
Brucella sp.....		4							3													
Clostridium hemolyticum..		1																				
" sp.....		70					1		1						5	2			Duck		1	
"																			Fish		1	
"																				Guinea pig		1
"																				Mink		1
"																				Tuna fish		1
Coccidia sp.....			2													1						

Table v (Continued)

Bacteriology, Parasitology, Pathology and Virology Report (Continued)

FINDING	SPECIMEN AND NUMBER															MISCELLANEOUS					
	BAT	CAT	CATTLE	CHICKEN	CHINCHILLA	DEER	DOG	ELK	HAMSTER	HORSE	MEAT	MEAT MEAL	MILK	RABBIT	SHEEP	SKUNK	SWINE	WATER	Specimen	No.	
Negative																					
Lesion, gross.....			1	1																	
" , microscopic.....							1														
Leukosis.....				1																	
Listeria sp.....			6																		
Lungworms.....		1	23		2				1											Mouse	1
Mange mites.....			2																		
Mites.....																					
Mold.....		1	1																		
Mycobacterium sp.....				1																	
Ova.....		2	4		1		7		1	3							2				
Parainfluenza ₃			75														5				
Parasite.....			3	1			1														
" , external.....							1														
Pasteurella sp.....			2																		
Pathogenic bacteria.....																					
Providencia sp.....									1						1						
Pseudomonas sp.....									1												
Psittacosis.....																					
Rabies.....	23	65	15				39		6					6		29				Bird	1
"																				Badger	1
"																				Bear	1
"																				Chipmunk	1
"																				Coyote	7
"																				Fox	4
"																				Gerbil	12
"																				Gopher	3
"																				Guinea pig	2
"																				Mole	2
"																				Mouse	18
"																				Muskrat	4

Table v (Continued)

Bacteriology, Parasitology, Pathology and Virology Report (Continued)

FINDING	SPECIMEN AND NUMBER														MISCELLANEOUS						
	BAT	CAT	CATTLE	CHICKEN	CHINCHILLA	DEER	DOG	ELK	HAMSTER	HORSE	MEAT	MEAT MEAL	MILK	RABBIT	SHEEP	SKUNK	SWINE	WATER	Specimen	No.	
<u>Negative</u>																					
Rabies.....																			Raccoon	8	
"																			Rat	5	
"																			Squirrel	5	
"																			Weasel	2	
<u>Salmonella sp.</u>	1	171	12	2	2		6		1	2	207			3	5		84	2	Bird	1	
"																			Duck	2	
"																			Feed	1	
"																			Fish	1	
"																			Grizzly bear	1	
"																			Grouse	2	
"																			Guinea pig	1	
"																			Mink	1	
"																			Non-fat dry milk	1	
"																			Savortex	1	
<u>Trichomonas fetus</u>																					
" sp.....																					
<u>Vibrio fetus</u>															16						
" sp.....															16		1				
Virus isolation.....																					
Virus Pig Pneumonia.....																	37				
White Muscle Disease.....																					
TOTAL NEGATIVE FINDINGS..	23	79	1739	31	4	2	69	-0-	8	37	1	290	-0-	9	69	29	323	4	Various	101	

Table v (Continued)

Bacteriology, Parasitology, Pathology and Virology Report (Continued)

FINDING	SPECIMEN AND NUMBER														MISCELLANEOUS							
	BAT	CAT	CATTLE	CHICKEN	CHINCHILLA	DEER	DOG	ELK	HAMSTER	HORSE	MEAT	MEAT MEAL	MILK	RABBIT	SHEEP	SKUNK	SWINE	WATER	Specimen	No.		
<u>INCONCLUSIVE</u>																						
Bovine Virus Diarrhea....			564					1														
Enterotoxemia.....			6														1					
Infectious Bovine Rhino- tracheitis.....			626					1														
Parainfluenza ₃			66																			
TOTAL INCONCLUSIVE FINDINGS.....	-0-	-0-	1262	-0-	-0-	-0-	-0-	2	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	1	-0-	Various		-0-	

TABLE VI

CHEMICAL REPORT

BLOOD ANALYSES	CALCIUM			CAROTENE			MAGNESIUM			PHOSPHORUS			VITAMIN A		
	High	Norm.	Low	High	Norm.	Low	High	Norm.	Low	High	Norm.	Low	High	Norm.	Low
Avian.....			1												
Bovine.....	23	121	47						8						
Equine.....	2	3	4	1	3	2	5	40	1	3	4	1	101	111	46
Ovine.....	2		5	1	3		2			1	2	4		2	2
Porcine.....	7	6	15	1	6	1	1	1		15	9			4	6
TOTAL BLOOD ANALYSES.....	34	130	72	3	239	28	7	42	8	62	77	75	102	121	55

DRUG DETECTION TESTS ON RACE HORSES

	POSITIVE	SUSPICIOUS	NEGATIVE
Saliva.....			2
Urine.....	50		467
TOTAL DRUG DETECTION TESTS ON RACE HORSES.....	50	-0-	469

Table vi (Continued)

Chemical Report (Continued)

MEAT ANALYSES	TOTAL PROTEIN	MEAT PROTEIN	SOY PROTEIN	WATER	ADDED WATER	PRESER-VATIVES	NON - FAT DRY MILK	FAT	CONTAMI-NATION	NITRATE NITRITE	SALT	ASCORBATE PHOSPHATES	CEREAL
Bacon.....	1	1		1	1						1		
Beef patties.....	11	11	5	11	10	1		11					2
Bologna.....	33	33	5	33	34		30	20		1			9
Braunschweiger.....	3	3	1	3	3		2	2					1
Corned beef.....	2	2		2	2					2	2		
Frankfurters.....	6	6	2	6	6		5	6					
Ham.....	10	5		10	10					9	9		
Hamburger.....	21	21	10	26	21	15	5	29	2				13
Meat patties.....	7	7	3	7	7			2					5
Salami.....	9	9	2	9	9		8	2					4
Sausage.....	52	41	8	51	49	12	8	40					16
Seasonings & cures...	2								84	61		27	
Thuringer.....	1	1	1	1	1								1
Wieners.....	5	5		5	5		5	4		2			1
Miscellaneous.....	5	5		5	5	6			62	13	5		
TOTAL MEAT ANALYSES..	168	150	37	170	163	34	65	116	148	89	17	27	52

NITRATE ANALYSES

	FIT	QUESTIONABLE	UNFIT
Feed.....	9	1	
Water.....	71	37	18
TOTAL NITRATE ANALYSES.....	80	38	18

Table vi (Continued)

Chemical Report (Continued)

PESTICIDE RESIDUE ANALYSES

Fat:

	POSITIVE	TRACE	NEGATIVE
Bear.....			
Dog.....	1		6
Heron.....	2		
Milk.....	19		177
TOTAL PESTICIDE RESIDUE ANALYSES.....	22	-0-	183

TOXICOLOGY ANALYSES

Avian:

	ARSENIC	COPPER	CYANIDE	LEAD	MERCURY	STRYCHNINE
	Pos.	Pos.	Pos.	Pos.	Pos.	Pos.
Crop contents.....						1
Gizzard contents.....						
Intestine contents.....	2			2		1
Liver.....				2		

Bovine:

	ARSENIC	COPPER	CYANIDE	LEAD	MERCURY	STRYCHNINE
	Pos.	Pos.	Pos.	Pos.	Pos.	Pos.
Abscesses.....	1			1		
Blood.....				2		
Kidney.....	1			23		
Liver.....	26	1		41		
Stomach contents.....	7			6	1	2

Canine:

	ARSENIC	COPPER	CYANIDE	LEAD	MERCURY	STRYCHNINE
	Pos.	Pos.	Pos.	Pos.	Pos.	Pos.
Kidney.....	1			3		
Liver.....	1			5		
Stomach contents.....	1			1		
Urine.....	1		1	16		16
	2			2		41

Table vi (Continued)

Chemical Report (Continued)

Toxicology Analyses (Continued)

Other: (Continued)
 fluid and packing material.....
 Salt.....
 Water.....
 Mead.....
 TOTAL TOXICOLOGY ANALYSES.....

	ARSENIC		COPPER		CYANIDE		LEAD		MERCURY		STRYCHNINE	
	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
		2						2				
		2						2				
		1						3				
								1				
	15	173	1	4	-0-	4	93	153	1	1	18	69

WATER ANALYSES

Mineral content for livestock consumption.....
 TOTAL WATER ANALYSES.....

	FIT	QUESTIONABLE		UNFIT
		Pos.	Neg.	
	99		21	31
	99		21	31

MISCELLANEOUS ANALYSES

Dried milk for lactose..... 2

TOTAL ALL CHEMICAL ANALYSES..... 3,836

TABLE VII

SEROLOGY REPORT

TEST	SPECIE	POSITIVE	NEGATIVE	SUSPICIOUS	TOTAL
Anaplasma CF	Cattle.....	152	6,396	378	6,926
"	Elk.....		1		1
Brucella abortus agglutination	Bear.....		10		10
"	Bison.....		23		23
"	Cattalo.....		1		1
"	Cattle.....	254	124,626	1,931	126,811
card test (field)	"	166	40,839	3	41,008
field test	"		832	7	839
seminal plasma	"		59		59
"	Deer.....		64		64
"	Dog.....		2		2
"	Elk.....		1		1
"	Goat.....		30		30
"	Horse.....	4	13	8	25
"	Moose.....		1		1
"	Mountain sheep..		2		2
"	Mule.....		1		1
"	Sheep.....		9		9
"	Swine.....		276		276
card test (field)	"		1,396		1,396
field test	"				
ring test	Cream.....		1		1
"	"		3,633	17	3,650
Leptospira canicola agglutination	Milk.....		586	1	587
"	Cattle.....		4		4
"	Dog.....		8		8
"	Swine.....			1	1
Grippe-typhosa agglutination	Cattle.....	12	677	53	742
"	Swine.....		24		24
hardjo agglutination	Cattle.....	12	679	54	745
"	Swine.....		24		24
icterohemorrhagia agglutination	Cattle.....		4	1	5
"	Dog.....		6	3	9
"	Swine.....		1		1
nomona agglutination	Bear.....		10		10

Table vii (Continued)

Serology Report (Continued)

TEST	SPECIE	POSITIVE	NEGATIVE	SUSPICIOUS	TOTAL
<u>Leptospira pomona</u> agglutination.....	Cattle.....	103	1,881	243	2,227
" "	Deer.....		42		42
" "	Dog.....		8	1	9
" "	Elk.....		1		1
" "	Horse.....		47	11	58
" "	Mountain sheep..		2		2
" "	Moose.....			1	1
" "	Sheep.....		1		1
" "	Swine.....		57	1	58
<u>Salmonella pullorum</u> agglutination field test.....	Chicken.....	8	5,767		5,775
TOTAL SEROLOGY TESTS.....		711	188,045	2,719	191,475

TABLE I

OFFICIAL ANIMAL INSPECTIONS REPORT

SPECIE	NUMBER	INSPECTED
<u>Cattle</u>		
Inspected for interstate shipment.....	778,631	
Inspected at livestock auction markets.....	886,236	
Backtagged.....	186,191	
Bled for brucellosis tests.....	83,104	
Tested for tuberculosis.....	21,743	
Miscellaneous inspections.....	<u>18,965</u>	
Total Cattle.....		1,974,870
<u>Horses</u>		
Inspected for interstate shipment.....	2,503	
Inspected at livestock auction markets.....	5,256	
Miscellaneous inspections.....	<u>20</u>	
Total Horses.....		7,779
<u>Sheep</u>		
Inspected for interstate shipment.....	317,078	
Inspected at livestock auction markets.....	202,913	
Miscellaneous inspections.....	<u>31,823</u>	
Total Sheep.....		551,814
<u>Swine</u>		
Inspected for interstate shipment.....	1,299	
Inspected at livestock auction markets.....	196,591	
Miscellaneous inspections.....	<u>3,562</u>	
Total Swine.....		201,452
<u>Poultry</u>		
Inspected for interstate shipment.....	2	
Miscellaneous inspections.....	<u>371</u>	
Total Poultry.....		373
<u>Dogs and Miscellaneous Animals</u>		
Inspected for interstate shipment.....	12,358	
Miscellaneous inspections.....	<u>1,021</u>	
Total Dogs and Miscellaneous Animals.....		<u>13,379</u>
<u>TOTAL OFFICIAL ANIMAL INSPECTIONS.....</u>		<u>2,749,667</u>

TABLE II

ANIMALS IMPORTED INTO MONTANA

POINT OF ORIGIN	CATTLE	HORSES	SHEEP	SWINE	POULTRY	DOGS & MISC. ANIMALS	TOTAL
Alabama.....						7	7
Alaska.....	3					70	73
Arizona.....	151	106				23	280
Arkansas.....	230	10				13	253
California.....	1,442	144				28	1,614
Colorado.....	5,822	251	938			65	7,076
Connecticut....		2					2
Florida.....	179	5				18	202
Georgia.....		1				5	6
Idaho.....	15,564	119	5,373	1,434		37	22,527
Illinois.....	50	4				14	68
Indiana.....	2		1	1		4	8
Iowa.....	3,437	45		30,428		15	33,925
Kansas.....	313	6				17	336
Kentucky.....	1	3				2	6
Maine.....		1					1
Maryland.....		13		1			14
Massachusetts..	3						3
Michigan.....	9	6				6	21
Minnesota.....	1,364	19		6,632		43	8,058
Mississippi....	118			1		7	126
Missouri.....	217	5		7		19	248
Nebraska.....	1,244	62		12,871		27	14,204
Nevada.....	202	45				13	260
New Jersey.....	13	1					14
New Mexico.....	93	17				8	118
New York.....	93	2					95
North Carolina.						7	7
North Dakota...	14,738	117	12,073	3,734		13	30,675
Ohio.....	12	2		2		5	21
Oklahoma.....	384	23				12	419
Oregon.....	408	61	327			67	863
Pennsylvania...	151			2			153
South Carolina.						1	1
South Dakota...	9,126	100	10,340	35,829	150	11	55,556
Tennessee.....						6	6
Texas.....	13,633	48	1,754	2		26	15,463
Utah.....	397	89	81	12		34	613
Vermont.....						1	1
Virginia.....	34						34
Washington.....	2,342	149	120	371		118	3,100
Wisconsin.....	2,048	8				20	2,076
Wyoming.....	15,159	252	6,331	393		30	22,165
Canada.....	3,141	1,278	882	5,287	3,914	3,793	18,295
Mexico.....	436	3					439
TOTAL.....	92,559	2,997	38,220	97,007	4,064	4,585	239,432

TABLE III

OFFICIAL INSPECTIONS MADE AT MONTANA LIVESTOCK AUCTION MARKETS

MARKET LOCATION	CATTLE	HORSES	SHEEP	SWINE	TOTAL
Baker.....	8,358	49	59	10,900	19,366
Billings Commission..	130,056	1,281	53,458	48	189,843
Billings Public.....	118,039	1,958	53,238	40,798	214,033
Bozeman.....	28,481	313	18,651	6,844	54,289
Butte.....	87,267	136	336	13,398	101,137
Dillon.....	7,982	2	14,754	3,399	26,137
Glasgow.....	49,943	237	5,400	38,865	94,445
Glendive.....	42,896	142	908	6,086	50,032
Great Falls.....	65,699	-0-	292	-0-	65,991
Hamilton.....	9,049	132	1,537	2,192	12,910
Havre.....	33,058	-0-	767	-0-	33,825
Kalispell.....	37,941	201	1,866	18,184	58,192
Lewistown.....	50,449	-0-	12,158	17,940	80,547
Miles City.....	34,067	87	330	1,059	35,543
Missoula.....	53,729	479	2,353	3,750	60,311
Shelby.....	17,457	35	178	-0-	17,670
Sidney.....	111,765	204	31,628	33,128	176,725
TOTAL INSPECTIONS....	886,236	5,256	202,913	196,591	1,290,996

TABLE IV

MONTANA VETERINARIANS' ANIMAL DISEASE REPORT

TYPE OF DISEASE	CATTLE		HORSES		SHEEP		SWINE		POULTRY		DOGS		CATS	
	Cases	Herds	Cases	Herds	Cases	Herds	Cases	Herds	Cases	Flocks	Cases	Cases	Cases	Cases
BACTERIAL DISEASES														
Actinomycosis-Bacillosis.....	1,325	1,139												
Bacillary hemoglobinuria.....	199	164												
Black Disease.....	1	1			1	1								
Blackleg.....	48	34												
Brucellosis.....			2	1										
<u>Clostridium perfringens</u>														
" <u>sordelli</u>	4	1												
" sp.....	6	2												
Diphtheria.....	123	59												
Distemper.....			323	376			6	1						
Dysentery.....							66	2						
Edema, malignant.....	8	3	1	1										
Enteritis.....							30	3						
" , <u>E. coli</u>	244	60												
" , necrotic.....							71	6						
Enterotoxemia.....	218	65			222	60								
Erysipelas.....							626	76						
Foot-Rot.....	2	1			6,758	27								
Leptospirosis.....	242	54	1	1			5	2				90		
Listeriosis.....					21	4								
Mastitis.....	189	47												
Pasteurellosis.....					25	1								
Pneumonia.....	106	19					44	5						
Pyosepticemia.....			1	1										
Ram epididymitis.....					34	10								
Streptococciosis.....							1	1						
Tetanus.....	12	8	4	4										
Tuberculosis.....										2			2	
Vibriosis.....	715	27			81	4								
TOTAL BACTERIAL DISEASES.....	3,947	1,739	332	384	7,142	107	849	96	2	2	90	2	90	-0-

Table iv (Continued)

Montana Veterinarians' Animal Disease Report (Continued)

TYPE OF DISEASE	CATTLE		HORSES		SHEEP		SWINE		POULTRY		DOGS		CATS	
	Cases	Herds	Cases	Herds	Cases	Herds	Cases	Herds	Cases	Flocks	Cases	Cases	Cases	
<u>PROTOZOAN DISEASES</u>														
Coccidiosis.....	3,912	456												
Eperythrozoonosis.....						1	2							
Hemobartonellosis.....												1		1
Toxoplasmosis.....														
TOTAL PROTOZOAN DISEASES.....	3,912	456	-0-	-0-	-0-	-0-	2	1	-0-	-0-	1	1		1
<u>VIRAL AND RICKETTSIAL DISEASES</u>														
Anaplasmosis.....	140	45												
Contagious ecthyma.....						12								
Distemper.....														1,561
Encephalitis.....	4	4	12	12										
Enteritis: virus.....	10	1												
Enzootic abortion.....														
" Bovine Abortion.....	7	2												
Infectious anemia.....			2	2										
" hepatitis.....														125
Influenza.....			840	500										
Lip and leg ulceration.....														
Malignant catarrhal fever.....	2	2												
Mucosal virus diarrhea.....	488	107												
Pneumonia.....														
Polyarthritis.....														
Posthitis.....														
Pox.....	149	9												
Rhinotracheitis.....	3,100	100												
Shipping fever.....	6,603	476												
Warts.....	58	28	1	1										
TOTAL VIRAL AND RICKETTSIAL.....	10,561	774	855	515	618	18	86	5	-0-	-0-	1,686			-0-

Table iv (Continued)

Montana Veterinarians' Animal Disease Report (Continued)

TYPE OF DISEASE	CATTLE		HORSES		SHEEP		SWINE		POULTRY		DOGS		CATS	
	Cases	Herds	Cases	Herds	Cases	Herds	Cases	Herds	Cases	Flocks	Cases	Cases	Cases	Cases
<u>UNKNOWN ETIOLOGY</u>														
Brisket edema.....	21	16												
Cancer eye.....	2,303	1,487												
Foot-Rot.....	313	86												
Gut edema.....							25	6						
Infectious keratitis.....	544	135												
Mastitis-metritis ag.....							2	2						
Pulmonary emphysema.....	460	164												
Urolithiasis.....	1,703	1,074				3								
TOTAL UNKNOWN ETIOLOGY.....	5,344	2,962	-0-	-0-	8	3	27	8	-0-	-0-	-0-	-0-	-0-	-0-
TOTAL ALL TYPES OF DISEASES.....	26,418	6,068	1,890	919	9,476	150	1,178	169	2	2	1,779	2	1	1

TABLE V

BRUCELLOSIS INFECTED HERDS

<u>FISCAL YEAR</u>	<u>NUMBER OF INFECTED HERDS</u>	<u>PERCENT INFECTED HERDS IN MONTANA</u>
First Area Test in Montana.....	2,434.....	7.96%
July 1, 1957.....	666.....	2.36%
July 1, 1958.....	357.....	1.24%
July 1, 1959.....	238.....	0.92%
July 1, 1960.....	135.....	0.56%
July 1, 1961.....	93.....	0.34%
July 1, 1962.....	49.....	0.16%
July 1, 1963.....	44.....	0.15%
July 1, 1964.....	36.....	0.14%
July 1, 1965.....	37.....	0.14%
July 1, 1966.....	30.....	0.12%
July 1, 1967.....	26.....	0.11%
July 1, 1968.....	14.....	0.07%
July 1, 1969.....	9.....	0.03%
July 1, 1970.....	13.....	0.06%
July 1, 1971.....	11.....	0.04%

TABLE VI

COUNTY DISTRIBUTION OF REMAINING BRUCELLOSIS INFECTED HERDS AS OF JUNE 30, 1971

<u>COUNTY</u>	<u>NUMBER OF HERDS</u>
Fallon.....	1
Flathead.....	2
Glacier.....	3
Hill.....	1
Sheridan.....	2
Valley.....	1
Yellowstone.....	1
<u>TOTAL.....</u>	<u>11</u>

TABLE VII

BOVINE BRUCELLOSIS TEST RECORD

<u>FISCAL YEAR</u>	<u>NUMBER TESTED</u>	<u>NUMBER REACTORS</u>	<u>PERCENT</u>
1962.....	96,079.....	337.....	0.35%
1963.....	107,404.....	227.....	0.20%
1964.....	91,484.....	455.....	0.40%
1965.....	123,876.....	438.....	0.35%
1966.....	160,969.....	602.....	0.31%
1967.....	129,502.....	500.....	0.38%
1968.....	120,643.....	376.....	0.31%
1969.....	128,343.....	341.....	0.26%
1970.....	163,570.....	507.....	0.31%
1971.....	242,890.....	451.....	0.18%

TABLE VIII

BOVINE BRUCELLOSIS RING TEST RECORD -- MILK AND CREAM

<u>FISCAL YEAR</u>	<u>NUMBER TESTED</u>	<u>NUMBER SUSPICIOUS</u>	<u>PERCENT</u>
1962.....	10,609.....	78.....	0.73%
1963.....	10,085.....	50.....	0.49%
1964.....	12,805.....	41.....	0.32%
1965.....	13,411.....	54.....	0.32%
1966.....	10,969.....	37.....	0.34%
1967.....	9,765.....	41.....	0.42%
1968.....	8,180.....	27.....	0.30%
1969.....	8,152.....	11.....	0.13%
1970.....	3,810.....	6.....	0.13%
1971.....	4,237.....	18.....	0.42%

TABLE IX

CALVES OFFICIALLY VACCINATED WITH BRUCELLA ABORTUS VACCINE - STRAIN 19

YEAR	DOSES	YEAR	DOSES	YEAR	DOSES	YEAR	DOSES	YEAR	DOSES
1962..	209,472	1964..	297,002	1966..	287,642	1968..	240,890	1970..	247,844
1963..	250,899	1965..	267,367	1967..	282,636	1969..	231,782	1971..	296,992

TABLE X

VALIDATED BRUCELLOSIS-FREE SWINE HERDS

FISCAL YEAR	NUMBER OF HERDS
1963.....	0
1964.....	9
1965.....	9
1966.....	10
1967.....	11
1968.....	10
1969.....	15
1970.....	15
1971.....	19

TABLE XI

NUMBER OF CATTLE TESTED FOR TUBERCULOSIS

FISCAL YEAR	NUMBER OF CATTLE	NUMBER OF REACTORS	PERCENT
1963.....	22,886	5	0.02%
1964.....	18,072	2	0.01%
1965.....	11,587	5	0.04%
1966.....	14,383	2	0.01%
1967.....	17,485	3	0.01%
1968.....	17,285	1	0.005%
1969.....	16,809	1	0.005%
1970.....	23,122	0	-0-
1971.....	21,743	1	0.004%

TABLE XII

POSITIVE RABIES

DATE	TOWN	COUNTY	SPECIE	NUMBER
July 9, 1970.....	Antelope.....	Sheridan.....	Bat.....	1
December 30, 1970.....	Alzada.....	Carter.....	Skunk.....	1
February 5, 1971.....	Bainville.....	Roosevelt.....	Cow.....	1
June 1, 1971.....	Pompeys Pillar.....	Yellowstone.....	Skunk.....	1

TABLE XIII

RABIES IN MONTANA ANIMALS

FISCAL YEAR	BADGER	BAT	CAT	CATTLE	SHEEP	SKUNK	TOTAL
1963.....	-0-	-0-	-0-	-0-	-0-	-0-	-0-
1964.....	-0-	1	-0-	-0-	-0-	2	3
1965.....	-0-	3	-0-	1	-0-	5	9
1966.....	-0-	1	-0-	-0-	-0-	15	16
1967.....	-0-	1	-0-	1	1	2	5
1968.....	1	4	-0-	-0-	-0-	6	11
1969.....	-0-	5	-0-	1	-0-	7	13
1970.....	-0-	-0-	1	-0-	-0-	-0-	1
1971.....	-0-	1	-0-	1	-0-	2	4
TOTAL.....	1	16	1	4	1	39	62

TABLE XIV

OUT-OF-STATE BREEDERS HOLDING PERMITS TO IMPORT SEMEN FOR ARTIFICIAL INSEMINATION

All West Breeders, Burlington, Washington.....	134
American Breeders Service, Inc. Madison and DeForest, Wisconsin.....	120
Big Beef Hybrids, Stillwater, Minnesota.....	17
Carnation Breeding Service, Watertown, Wisconsin.....	255
Curtiss Breeding Service, Cary, Illinois.....	155
International Beef Breeders, Denver, Colorado.....	34
Prairie Breeders, Calgary, Alberta, Canada.....	39
Southern Breeders Ltd., Lethbridge, Alberta, Canada.....	1
United Breeders, Inc., Logan, Utah.....	2
Western Breeders, Balzac, Alberta, Canada.....	35
TOTAL.....	792

TABLE I
 OFFICIAL INSPECTIONS AND LABORATORY TESTS
 OF
MILK, MILK PRODUCTS, DAIRIES AND MILK PLANTS

OFFICIAL INSPECTIONS AND LABORATORY TESTS	NUMBER
Antibiotic detection tests.....	4,402
Bacterial counts.....	4,242
<u>Brucella abortus</u> ring tests.....	2,644
<u>Chemical Analyses:</u>	
General chemical.....	1,249
Wisconsin Mastitis Tests.....	2,451
Total Chemical Analyses.....	3,700
Coliform tests.....	4,438
Dairy inspections.....	1,240
Distributor facilities inspections.....	75
Milk plant equipment tests.....	91
Milk plant facilities inspections.....	113
Milk tank trucks inspections.....	41
Pesticide residue analyses.....	205
Tuberculosis tests.....	9,520
<u>TOTAL OFFICIAL INSPECTIONS AND LABORATORY TESTS.....</u>	<u>31,297</u>

TABLE II
 RETAIL RAW DAIRIES SANITATION COMPLIANCE RATINGS
 WITH
MONTANA LIVESTOCK SANITARY BOARD REGULATIONS

RETAIL RAW DAIRY CODE NUMBER	POUNDS SOLD DAILY	DAIRY SCORE
R-1.....	70.....	97%
R-2.....	900.....	99%
R-15.....	400.....	93%
R-21.....	240.....	91%
R-25.....	180.....	94%
R-33.....	160.....	91%
R-34.....	600.....	93%
R-35.....	100.....	93%
<u>TOTALS AND AVERAGE.....</u>	<u>2,650.....</u>	<u>94%</u>

TABLE III

MILK PLANT SANITATION COMPLIANCE RATINGS
WITH
MONTANA LIVESTOCK SANITARY BOARD REGULATIONS

MILK PLANT CODE NUMBER	POUNDS SOLD DAILY	PLANT SCORE	PRODUCER'S SCORE	PASTEURIZED MILK RATING
25-1.....	25,000.....	98%.....	94%.....	96%
25-2.....	65,000.....	88%.....	95%.....	91%
25-3.....	1,800.....	92%.....	95%.....	94%
25-4.....	4,000.....	90%.....	97%.....	93%
25-5.....	700.....	88%.....	96%.....	92%
25-7.....	34,000.....	92%.....	92%.....	92%
25-8.....	1,500.....	93%.....	90%.....	91%
25-10.....	82,000.....	96%.....	93%.....	94%
25-13.....	250.....	95%.....	96%.....	95%
25-15.....	800.....	97%.....	96%.....	96%
25-16.....	41,000.....	93%.....	90%.....	91%
25-18.....	50,000.....	94%.....	92%.....	93%
25-19.....	17,000.....	88%.....	93%.....	90%
25-20.....	18,000.....	94%.....	93%.....	93%
25-21.....	58,000.....	92%.....	91%.....	91%
25-25.....	25,000.....	89%.....	94%.....	91%
25-30.....	21,000.....	95%.....	94%.....	93%
25-32.....	65,000.....	94%.....	93%.....	93%
25-33.....	17,000.....	99%.....	94%.....	96%
25-36.....	690.....	95%.....	95%.....	95%
25-38.....	62,000.....	97%.....	95%.....	96%
25-39.....	6,000.....	94%.....	92%.....	93%
25-40.....	20,000.....	97%.....	93%.....	95%
25-43.....	800.....	91%.....	90%.....	90%
25-46.....	500.....	89%.....	93%.....	91%
25-47.....	58,000.....	94%.....	93%.....	93%
TOTALS AND AVERAGE..	675,040.....	93%.....	94%.....	93%

TABLE I

ESTABLISHMENTS UNDER OFFICIAL STATE MEAT INSPECTION

<u>ESTABLISHMENT NAME</u>	<u>LOCATION</u>	<u>ESTABLISHMENT NO.</u>
<u>Meat Packing Houses</u>		
Amy's Sausage Kitchen.....	Butte.....	55
Arctic Lockers.....	Kalispell.....	37
Ben's H & H Market.....	Missoula.....	29
Big Sky Market.....	Manhattan.....	52
Buck's Meat Processing & Sales.....	Broadus.....	45
Christensen's Wholesale Meats.....	Missoula.....	39
Diamond Bar Meats.....	Missoula.....	38
Excelsior Meat Market.....	Butte.....	57
Great Falls Meat Company.....	Great Falls.....	36
Hickory Kitchen.....	Great Falls.....	31
K & C Meat Supply.....	Missoula.....	40
Kim's Meat Company, Inc.....	Rollins.....	54
Maddison Meats.....	Sheridan.....	41
M & P Meat Company, Inc.....	Great Falls.....	34
Marchello's I.G.A.....	Red Lodge.....	51
Montana Meat Company.....	Helena.....	5
Northside Locker Plant, Inc.....	Billings.....	53
Pioneer Products, Inc.....	Billings.....	42
Pioneer Products, Inc. #2.....	Billings.....	42B
Riley's Meats.....	Butte.....	56
Snowy Mountain Meats.....	Lewistown.....	33
Spear Meat Company.....	Billings.....	50
Terminal Food Center, Inc.....	Butte.....	30
Tower Meats.....	Helena.....	58
Triplett Meats.....	Kalispell.....	35
Valley Distributors, Inc.....	Billings.....	32
Weggenman's Market.....	Helena.....	59
Your Food Bank.....	Billings.....	43

Slaughterhouses

Barsotti Meat Plant.....	Great Falls.....	8
*Blastoch Meats, Inc.....	Butte.....	13
Brooke Processing Plant.....	Whitehall.....	28
City Meat Company.....	Wolf Point.....	25
*Fan Mountain Meats.....	Ennis.....	19
*Hamilton Packing Company.....	Hamilton.....	47
Hardin Meat Market.....	Hardin.....	20
*Havre Abattoir.....	Havre.....	12
*Kalispell Meat Company.....	Kalispell.....	9
*Marias Packing Company.....	Shelby.....	17
*Mickey's Packing Plant.....	Great Falls.....	18
*Miles City Packing Company.....	Miles City.....	26
*Montana Meat Market.....	Red Lodge.....	2
Montana State Prison.....	Deer Lodge.....	4
Montana State University.....	Bozeman.....	23
*Rahr Meat Service.....	Glandive.....	6
*Rick's Packing Plant.....	Livingston.....	10

Table 1 (Continued)

Establishments Under Official State Meat Inspection (Continued)

<u>ESTABLISHMENT NAME</u>	<u>LOCATION</u>	<u>ESTABLISHMENT NO.</u>
<u>Slaughterhouses (Continued)</u>		
*Roberts Packing Plant.....	Dillon.....	16
*Rocky Mountain Packing Company, Inc...	Havre.....	21
*Schramm Packing Company.....	Missoula.....	3
*Seitz-Bowers Processing Plant.....	Roundup.....	48
Stanford Meat Market.....	Stanford.....	11
*Timberland Packing Corporation.....	Lewistown.....	22
*Tolman's Meat Company.....	Hamilton.....	46
*Triangle Packing Company.....	Choteau.....	27
*Valley Meat Packing Company.....	Sidney.....	24
*Vandevanter Meats.....	Columbia Falls.....	7
*White's Meat Processing.....	Ronan.....	15

*Also does meat processing.

TABLE II

ESTABLISHMENTS UNDER FEDERAL MEAT INSPECTION

<u>ESTABLISHMENT NAME</u>	<u>LOCATION</u>	<u>ESTABLISHMENT NO.</u>
<u>Meat Depot</u>		
Safeway Stores, Inc.....	Butte.....	2440
<u>Meat Packing Houses</u>		
4B's Wholesale Supply, Inc.....	Missoula.....	2480
Montana Smokehouse, Inc.....	Kalispell.....	2490
Swift & Co.....	Billings.....	2493
Truzzolino Food Products.....	Butte.....	1291
<u>Slaughterhouses</u>		
Bonanza Packing Co., Inc.....	Helena.....	1475A
Great Falls Meat Co.....	Great Falls.....	301
John R. Daily, Inc.....	Missoula.....	2480
Midland Empire Packing Co.....	Billings.....	339
Pierce Packing Co.....	Billings.....	691

TABLE III

OFFICIAL ESTABLISHMENT INSPECTIONS

<u>TYPE OF ESTABLISHMENT</u>	<u>NUMBER OF INSPECTIONS</u>
Meat Depots.....	10
Meat Packing Houses.....	113
Poultry Meat Packing Houses.....	6
Rendering Plants.....	37
Slaughterhouses.....	168
Poultry Slaughterhouses.....	3
Rabbit Slaughterhouses.....	2
<u>TOTAL OFFICIAL ESTABLISHMENT INSPECTIONS</u>	<u>339</u>

TABLE IV
ANIMALS SLAUGHTERED UNDER STATE AND FEDERAL MEAT INSPECTION

SPECIE	STATE	FEDERAL
	Number	Number
Cattle.....	26,224	133,535
Calves.....	319	-0-
Sheep.....	1,503	-0-
Swine.....	24,715	292,326
TOTAL.....	52,761	425,861

TABLE V
WHOLE CARCASSES FOUND UNFIT FOR HUMAN CONSUMPTION
UNDER STATE AND FEDERAL MEAT INSPECTION

SPECIE	STATE	FEDERAL
	Number	Number
Cattle.....	49	547
Calves.....	-0-	-0-
Sheep.....	1	-0-
Swine.....	27	556
TOTAL.....	77	1,103

TABLE VI
PARTS OF CARCASSES FOUND UNFIT FOR HUMAN CONSUMPTION
UNDER STATE AND FEDERAL MEAT INSPECTION

SPECIE	STATE	FEDERAL
	Number	Number
Cattle.....	2,183	12,381
Calves.....	3	-0-
Sheep.....	427	-0-
Swine.....	12,276	43,451
TOTAL.....	14,889	55,832

TABLE VII
NUMBER OF BEEF AND SWINE LIVERS FOUND UNFIT FOR HUMAN CONSUMPTION
UNDER STATE AND FEDERAL MEAT INSPECTION

SPECIE	STATE	FEDERAL
	Number	Number
Beef.....	6,956	40,346
Swine.....	9,205	46,006
TOTAL.....	16,161	86,352

TABLE VIII

POUNDS OF MEAT AND/OR MEAT BY-PRODUCTS PROCESSED UNDER STATE MEAT INSPECTION

<u>TYPE OF PROCESSING</u>	<u>POUNDS</u>
<u>Placed in Cure</u>	
Beef.....	6,615
Pork.....	712,084
Other.....	10,288
<u>Smoked and/or Dried</u>	
Beef.....	12,308
Pork.....	633,648
<u>Sausage -- Fresh Finished.....</u>	458,538
<u>Sausage -- Smoked or Cooked</u>	
Franks, Wieners, Bologna.....	586,503
Other.....	175,303
<u>Loaf</u>	
Head Cheese; Chili; Jellied Product; Imitation Sausage.....	110,380
<u>Steak; Chops; Roasts; Boneless Cuts.....</u>	4,425,209
<u>Sliced Product</u>	
Bacon.....	62,127
Other.....	39,292
<u>Hamburger.....</u>	1,962,903
<u>Frozen & Unfrozen -- Specialty Items.....</u>	656,388
<u>Lard -- Rendered.....</u>	236,984
<u>Edible Tallow.....</u>	10,707
<u>Compound Containing Animal Fat.....</u>	85,700
<u>Boneless Beef.....</u>	1,323,585
<u>Pork Cut.....</u>	1,656,046
<u>Beef -- Wholesale Cuts.....</u>	4,318,559
<u>Poultry -- Cut Up.....</u>	82,024
<u>TOTAL POUNDS PROCESSED.....</u>	<u>17,565,196</u>

TABLE IX

MEAT AND MEAT BY-PRODUCTS REINSPECTED AND REJECTED UNDER STATE MEAT INSPECTION

<u>ITEM</u>	<u>POUNDS</u>
Reinspected Meat and/or Meat By-Product.....	10,667,094
Rejected Meat and/or Meat By-Product.....	1,431
<u>TOTAL POUNDS REINSPECTED AND REJECTED.....</u>	<u>10,668,525</u>

TABLE X

POUNDS OF BONELESS MANUFACTURING MEAT (BEEF) REJECTED AND ACCEPTED

<u>TOTAL LOT SIZE</u> <u>(Pounds)</u>	<u>REJECTED</u> <u>(Pounds)</u>	<u>ACCEPTED</u> <u>(Pounds)</u>
584,569.....	13,700	570,869

TABLE XI

DIAGNOSES OF WHOLE CARCASSES CONDEMNED AT SLAUGHTER UNDER STATE MEAT INSPECTION

<u>DIAGNOSIS</u>	<u>CATTLE</u>	<u>CALVES</u>	<u>SHEEP</u>	<u>SWINE</u>
Abscesses-Pyemia.....	12	0	0	18
Actinomycosis-Actinobacillosis.....	1	0	0	0
Adhesions.....	0	0	0	0
Anasarca.....	4	0	0	0
Arthritis-Polyarthritis.....	3	0	0	0
Bruises, injuries, etc.....	3	0	0	1
Emaciation.....	1	0	0	1
Enteritis-Gastritis-Peritonitis.....	3	0	0	1
Epithelioma.....	3	0	0	0
Icterus.....	1	0	0	0
Livers, miscellaneous lesions.....	0	0	1	0
Nephritis-Pyelitis.....	1	0	0	0
Pneumonia.....	4	0	0	0
Septicemia-Toxemia.....	4	0	0	4
Tuberculosis.....	2	0	0	0
Uremia.....	4	0	0	0
Miscellaneous.....	3	0	0	2
TOTAL WHOLE CARCASSES CONDEMNED.....	49	0	1	27

TABLE XII

DIAGNOSES OF BEEF LIVERS CONDEMNED AT SLAUGHTER UNDER STATE MEAT INSPECTION

<u>DIAGNOSIS</u>	<u>NUMBER</u>
Abscesses.....	3,747
Carotinosiis.....	7
Cirrhosis.....	55
Contamination.....	348
Distomiasis.....	2,052
Sawdust.....	149
Telangiectasis.....	235
Miscellaneous.....	363
TOTAL BEEF LIVERS CONDEMNED.....	6,956

TABLE XIII

DIAGNOSES OF PARTS OF CARCASSES CONDEMNED AT SLAUGHTER
UNDER STATE MEAT INSPECTION

DIAGNOSIS	CATTLE	CALVES	SHEEP	SWINE
Abscesses-Pyemia.....	324	0	20	753
Actinomycosis-Actinobacillosis.....	66	0	0	1
Adhesions.....	79	0	1	96
Anasarca.....	0	0	0	0
Arthritis-Polyarthritis.....	13	0	0	26
Bruises, injuries, etc.....	432	2	7	600
Caseous lymphadenitis.....	0	0	0	1
Contamination.....	1,145	0	60	1,149
Epithelioma.....	35	0	0	0
Livers, miscellaneous lesions.....	0	1	338	9,205
Nephritis-Pyelitis.....	39	0	0	2
Pericarditis.....	40	0	1	151
Pneumonia.....	7	0	0	23
Tuberculosis.....	2	0	0	266
Uremia.....	0	0	0	2
Miscellaneous.....	1	0	0	1
TOTAL PARTS OF CARCASSES CONDEMNED.....	2,183	3	427	12,276

