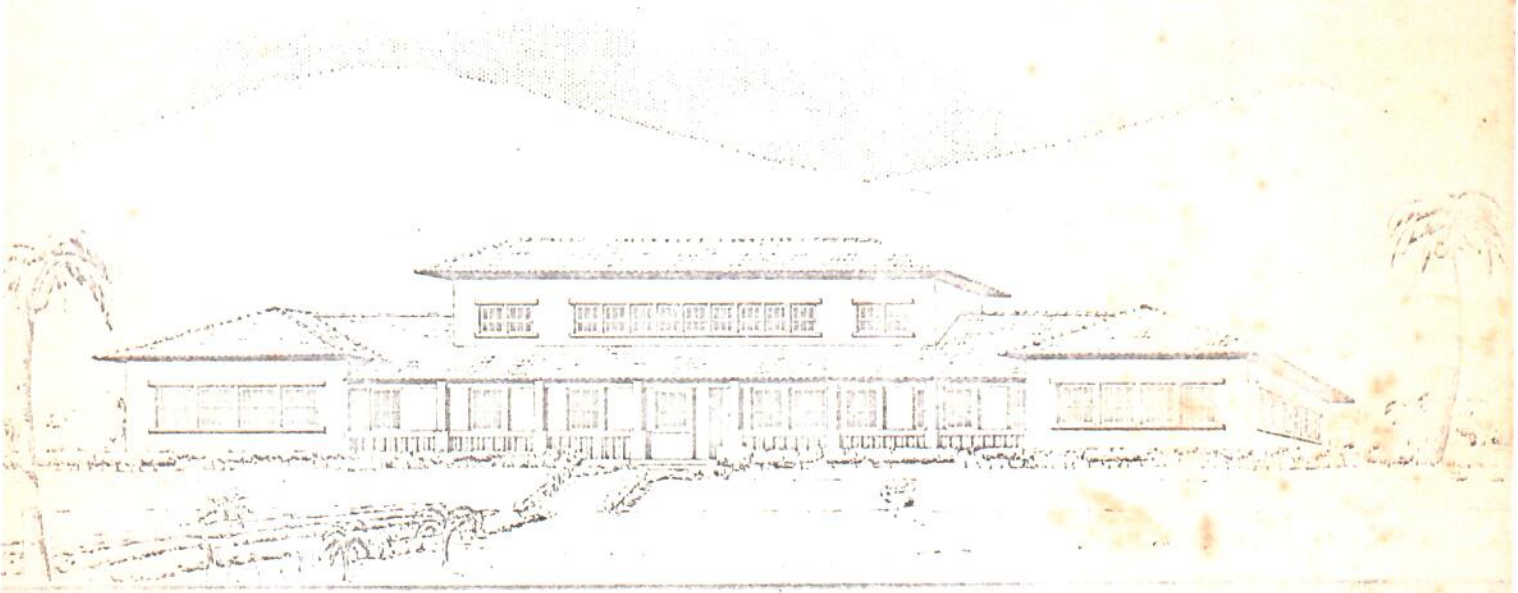


ANNUAL REPORT



PAN AMERICAN FOOT AND MOUTH DISEASE

1910

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"THE XIII PAN AMERICAN SANITARY CONFERENCE RESOLVES: To approve the action of the Pan American Sanitary Bureau in preparing the project for the organization of an Anti-Aftosa Center in the Americas, and to authorize the participation of the Bureau in the organization of such a Center until such time as some other Specialized Agency of the Organization of American States is prepared to take full charge, on the condition that financing of the Center is provided by funds other than those of the Pan American Sanitary Bureau."

The project was given final approval, late in 1950, by the Inter-American Economic and Social Council; the Pan American Sanitary Bureau was designated as the agency responsible for both administrative and technical direction of its activation and operation, with the cooperation of the Inter-American Institute of Agricultural Sciences. A published paper, which presents the background, developments and objectives of the Pan American Foot-and-Mouth Disease Center, is annexed to this report.

Participation of Member Governments.

In accordance with procedures set forth for the activation of Technical Cooperation projects of the Organization of American States, each of the 21 Member Governments were notified, on December 28, 1950, of the nature of the project. Each was asked to consider its approval since no further action could "be taken by the

PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER

Annual Report - 1951

I. INTRODUCTION

Status of project at beginning of year

At the start of the year 1951, the Pan American Foot-and-Mouth Disease Center consisted of an approved project plan for development within the Technical Cooperation Program of the Organization of American States. The project, designated OAS/TA 77, had been prepared by the Pan American Sanitary Bureau, in collaboration with the Inter-American Institute of Agricultural Sciences, upon specific request of the Secretary General of the Organization of American States.

This action was approved by the Pan American Sanitary Organization at the XIII Pan American Sanitary Conference (Ciudad Trujillo, 1950) and further participation of the Bureau was authorized by resolution reading as follows:

Bureau until the majority of the countries which will benefit from the project have expressed their willingness to participate in it." Within two months, twelve countries had replied approving the project and expressing a desire to take advantage of its benefits. Other affirmative replies followed quickly, and finally in November it could be announced that the governments of all of the 21 member nations of the Organization of American States had signified their intention to participate - a unanimous decision.

Selection of host country and site.

Four countries, each in South America, offered facilities and expressed a desire to be chosen as the host for the Center. During the month of March the veterinary medical staff of the Pan American Sanitary Bureau, augmented by the services of a Special Consultant, surveyed the offers. The survey provided an analysis which included such aspects as permanent facilities available at the time, availability and adequacy of proposed temporary arrangement, commitment on provision of permanent facilities, geographic position, apparent attitude and interest, living conditions, availability of susceptible test cattle, and academic and consultative potentialities. This information served as a basis for the Coordinating Committee on Technical Assistance of the Organ-

office in Rio de Janeiro as well as with the Brazilian Representative to the Inter-American Economic and Social Council in Washington.

The Agreement was signed in Rio de Janeiro, on 27 August 1951, by the Ministers of State for Foreign Affairs and for Agriculture, representing the Government of Brazil, and by the Director of the Pan American Sanitary Bureau. It was submitted, on 10 December 1951, by presidential message for action of the Congress.

Under terms of the agreement the Bureau, acting in behalf of the Organization of American States, would provide the international staff of the Center and all of its scientific and operational equipment, as well as funds for training, research, travel, and laboratory animals. The Government of Brazil would provide the land, structures, maintenance-services, utilities, and local labor. In addition, it would grant such privileges and immunities to the Center, including its staff and its operations, as are usually provided for international institutions of this type. The Government would also assist in the establishment of a source from which the Center could purchase cattle that are susceptible to foot-and-mouth disease.

Final action of Congress on the Agreement was not expected for some time and, in order not to cause undue delay

6.

in activating the Center, an interim agreement was completed. This understanding took the form of an exchange of letters between the Minister of Agriculture and the Director of the Pan American Sanitary Bureau (dated June 5 and June 15 respectively). In such fashion, the Ministry of Agriculture provided guarantees whereby the development of the Center might be immediately undertaken. This interim measure was approved by the Coordinating Committee on Technical Assistance of the Organization of American States.

II. OPERATIONAL FACILITIES

Permanent quarters

Structural facilities required by an institution such as the Pan American Foot-and-Mouth Disease Center must be unusually extensive and elaborate. The main reason for this can be explained by the nature of the causative agent of the disease. First of all, the aftosa virus is extremely elusive and fast-spreading so that strict precautions are necessary to prevent its escape from the laboratory. Second, the virus has several distinct types, each with a number of sub-types (or strains), so that elaborate facilities are required to avoid cross-contamination when working with the different strains. Finally, at present the only completely reliable method of diagnosing this disease, of differentiating the type and strain or causative virus, and of testing vaccines, is by using cattle as laboratory animals. Such procedures necessitate extensive stabling arrangements with strict precautions for virus security.

Plans for construction details and general layout for the Center were prepared in the Washington Offices of

the Pan American Sanitary Bureau. These plans were then studied by officials of the Brazilian Ministry of Agriculture and, after some slight modifications, blueprints were completed. The proposed layout of buildings and specific plans for the laboratory, one of the stable units and the administration building are reproduced in this report. (Annexes 2 through 5). The cost of new construction for the Center was estimated by Brazilian officials as between 10 and 12 million cruzeiros. This building program was not started in 1951.

Temporary quarters.

One of the reasons that São Bento was selected as the site for the Center was that it included certain buildings that could be adapted to form laboratories and offices for limited operations. The laboratory and office building, which had housed the National Plant Pathology Station, was vacated about mid-year, and was then redecorated and somewhat remodelled by the Ministry of Agriculture. The staff of the Center moved to the new location in November, after functioning for 4 months from the Zone Office of the Bureau in Rio de Janeiro. Efforts were then directed to installing such equipment and supplies as had arrived.

Staff.

The first appointment effected for this project was that of Dr. Ramón Rodríguez T., Chief, Department of Veterinary Bacteriology of the Bacteriological Institute, Santiago, Chile. Dr. Rodríguez began service on March 23 as special consultant on foot-and-mouth disease, until June 22 when he returned to the duties from which the Chilean Government had granted him a leave of absence. During that period Dr. Rodríguez visited Argentina, Brazil, Cuba, the Dominican Republic, Haiti, Uruguay and various parts of the United States, discussing with veterinary authorities the problem of the disease in the Americas and the proposed international program to combat it. The services of this consultant were of definite value in the early developmental stage of the project.

Appointments to the international staff made during the year were:

Director - Dr. Ervin A. Eichhorn (U.S.A.) - 1 June 1951

Chief of Laboratories - Dr. Raymundo G. Cunha (Brazil)

- 1 July 1951

Epizootiologist - Dr. Ralph C. Fish (U.S.A.) - 1 July 1951

Serologist - Mr. Fidel Mata O. (Mexico) - 1 August 1951

Virologist - position unfilled during 1951

Biophysics Technician - position unfilled during 1951

10.

Laboratory Technicians (4) - none during 1951

Administrative Officer - Mr. Ted Tenorio (U.S.A.) -

1 June 1951

Equipment.

Contacts were made in May with firms supplying the numerous and varied items of specialized equipment required by the Center. Specifications and price quotations were assembled, and orders for many of the items were placed during June and July. Although some of these had arrived prior to November, the New York dock strike and resulting rail embargoes to that dock seriously affected the shipment of important equipment. Among the materials thus delayed was the glassware, without which the laboratory work could not be instituted. Although en route, these shipments had not yet arrived at the end of the year.

Some customs delays were encountered with the first of the Center's shipments to arrive in Rio de Janeiro. However, efforts were being made to reach an understanding on procedures and means for expediting clearances.

Laboratory animals.

As mentioned above, the only completely reliable method of diagnosing foot-and-mouth disease, of differentiating the type and strain of causative virus, and of testing

vaccine, is by using cattle as laboratory animals. These cattle must be fully susceptible to the disease. In areas free from aftosa, the procurement of susceptible cattle is relatively simple, yet in Brazil - where the disease exists in practically all parts - special arrangements are necessary to assure a source of suitable cattle. Since, by definition, susceptible cattle are those which have never been exposed to the virus, it is essential that they originate and be maintained in an environment continuously free from that virus. Late in 1951, officials of the Brazilian government and of the Center began discussions on the provision of specially isolated and protected ranches for raising laboratory cattle. It was realized that this would be a formidable task since these cattle would be completely vulnerable to one of the most contagious agents known, and since the herds must obviously be maintained without the protection of vaccination.

Guinea pigs are indispensable to the proper operation of a foot-and-mouth disease diagnostic laboratory. In order that a supply of these animals might be available when needed, a breeding colony of 300 adult animals was established at the Center. These animals, a gift of the U. S. National Institutes of Health, were air-shipped to Brazil in December.

Finances

The approved budget of the OAS Technical Co-operation for the Center amounted to \$225,093.00 for the calendar year 1951. In May the budget was revised taking into account the actual starting date for the project; the new approved figure totalled slightly more than \$210,200.00.

Total allocations received from the OAS during 1951 were \$165,341.87.* Expenditures, itemized into major categories were:

| | |
|---------------------------------|---------------|
| Personnel (salaries) | \$ 27,009.19 |
| Personnel (allowances) | 5,738.77 |
| Travel | 22,165.42 |
| Space and equipment services .. | 31.04 |
| Other contractual services | 15,785.92 |
| Supplies and materials | 24,527.26 |
| Fixed charges and claims | 4,279.01 |
| Equipment | 57,669.05 |
| | <hr/> |
| Unobligated balance | \$ 157,205.66 |
| | 8,136.21 |
| | <hr/> |
| | \$ 165,341.87 |

* \$151,899.97 U. S. dollars and 251,632.20 Brazilian cruzeiros.

III. OPERATIONS

General.

The Center is considered to have four basic functions, stated briefly as 1) laboratory diagnosis, 2) training, 3) research, and 4) field service. There are not listed in the order of their importance or priority; they are, in fact, so interdependent that adequate development of any one could not proceed far without appropriate attention to the other three. Nothing in the way of laboratory diagnosis or research could be undertaken during 1951, since these activities were directly dependent upon completion of the physical plant.

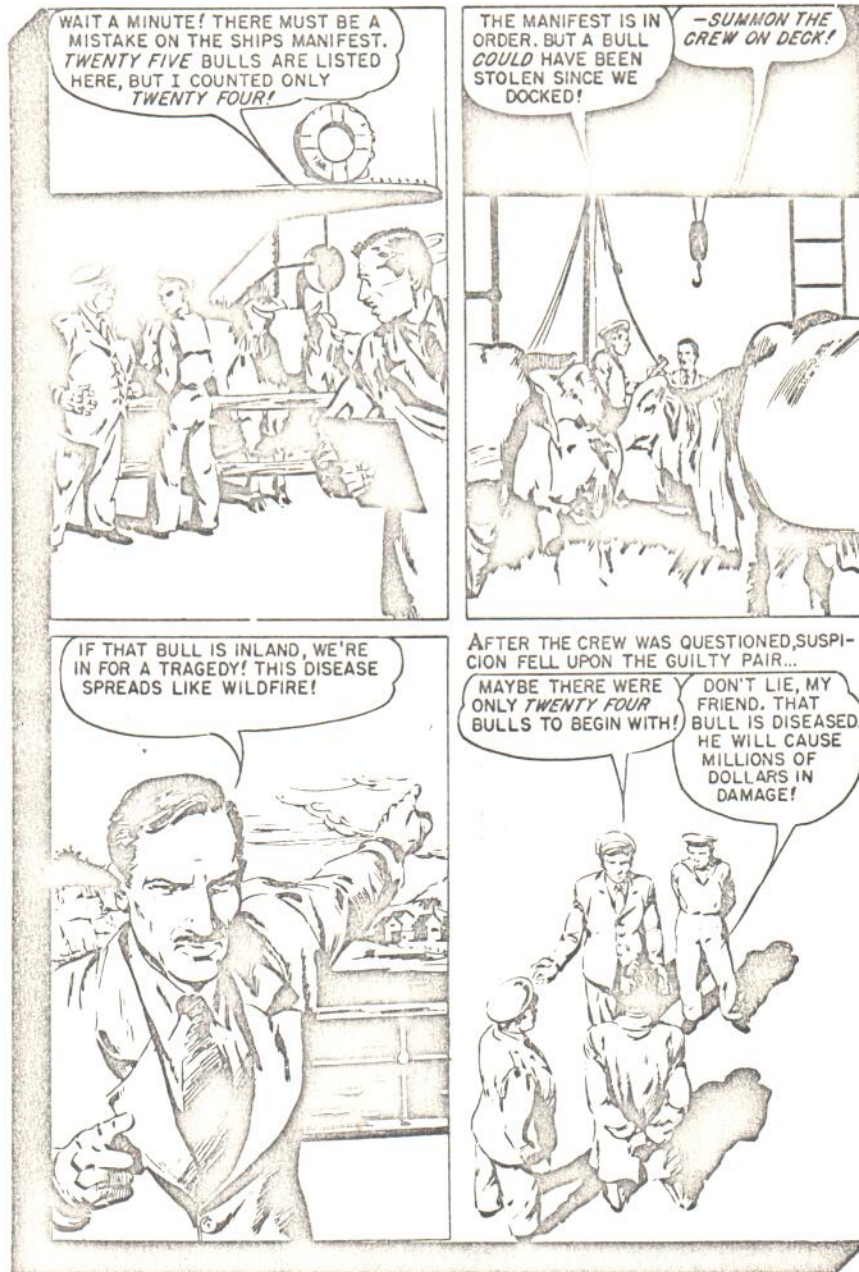
Training

Although one of the most important functions of the Center, formal technical training was not undertaken during the year. Plans for training courses were, however, in preparation and could be implemented as soon as physical facilities would permit.

Work was also begun on another phase of training - that of informing the public on foot-and-mouth disease and the importance of preventing its entry into disease-free

Figure 1

THE MAGNIFICENT BULL



Preparation of this educational booklet, designed for distribution to farmers and live-stock owners, was undertaken late in 1951. It emphasizes the gravity of foot and mouth disease and the importance of preventing its entry into areas free from the disease.

areas. Preparation of an illustrated booklet was begun in November. The booklet was being designed for distribution to farmers and livestock owners. Figure 1 is a reproduction of a typical page at the inked-art stage of production. The booklet will be printed in color in appropriate language, and a small quantity will be distributed to governments. Printing mats will also be provided to any government desiring to use the booklet for distribution.

Field Service

Ecuador

The first direct service was rendered to a Member Government in June. The Director of the Center visited Ecuador at the request of the government, and there examined with veterinary officials the requirements for instituting defense measures against entrance of aftosa from neighboring countries. This service was a continuation of the assistance rendered by joint efforts of the United States government and the Organization of American States in sending Dr. R. J. Anderson, U. S. Bureau of Animal Industry veterinarian, to Ecuador during the month of April. Dr. Anderson had surveyed the situation and made recommendations.

The country was revisited by the director, accompanied by the epizootiologist, in August. Conferences on aftosa

prevention were held with animal-disease control and other officials of the Government. Progress of anti-aftosa measures was reviewed and recommendations were submitted. The danger of the introduction of the disease and the need for strengthened defenses were emphasized.

Regional Consultative Foot-and-Mouth Disease
Conference.

Representatives of the Food and Agriculture Organization (FAO), the Pan American Sanitary Bureau and the Pan American Union, met early in 1951 and agreed that it was highly desirable to have a meeting to arrive at collective measures for stopping the international spread of foot-and-mouth disease in the Americas. A short time later it was learned that Government officials of the Republic of Panama had also considered calling such a meeting. Contact was then made with the Panamanian Government and arrangements completed whereby that Republic would be the host for the meeting with the three international organizations acting in an assisting capacity.

The Regional Consultative Foot-and-Mouth Disease Conference, held in Panama City, 21-24 August 1951, was attended by delegates from thirteen countries and territories. *

* British West Indies, Canada, Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, Netherlands West Indies, Nicaragua, Panama and the United States.

The director and the epizootiologist of the Pan American Foot-and-Mouth Disease Center presented papers on diagnosis of vesicular diseases, on methods of combatting an outbreak, and on the background and program of the Center.

Several acts were adopted at the Conference, including recommendations that the Center be sent - and that it disseminate - information relative to outbreaks of vesicular diseases, that countries utilize the services of the Center for the diagnosis of disease suspicious of aftosa, and that governments take full advantage of the Center's program of training personnel. It was also agreed that no research or vaccination should be allowed by the signatory governments unless recommended by the Center.

IV. INTERNATIONAL RELATIONS

Member Governments

It is noteworthy that the 21 governments, members of the Organization of American States and of the Pan American Sanitary Organization, have unanimously endorsed and supported the creation of the Pan American Foot-and-Mouth Disease Center. The cooperation in all countries of technicians, professional groups and government agencies with the Center has - without exception - been complete.

International Agencies

The activation and operation of the Pan American Foot-and-Mouth Disease Center is in accordance with the expressed policy of the Food and Agriculture Organization of the United Nations (FAO) of encouraging a regional approach to the problem of foot-and-mouth disease. Officials of FAO were contacted at the inception of the project for creation of the Center, and liaison has since been maintained. The cooperation between the Center and the FAO aftosa program is well exemplified by their joint action in assisting with the Regional Conference in Panama (see Section III, pages 15-16). The cooperative arrangement between the FAO program

and the Center was further crystallized by discussions between the Directors of FAO and the Pan American Sanitary Bureau. It was agreed that FAO should be primarily responsible for rendering technical aid (advisory field assistance) to governments in the prevention and control of this disease. The Center, as the regional agency, would serve to coordinate such activities, in addition to its functions of diagnosis, training and research.

Agreement was also reached whereby the Center and the International Office of Epizootics (Paris) are exchanging information on outbreaks of foot-and-mouth disease.