

URFMD021

**Executive Summary**

Representatives from the United States and Mexico visited Uruguay from September 21 - September 26, 2000 for two purposes: to assess the preventative measures that Uruguay has implemented in response to the recent outbreaks of foot and mouth disease (FMD) in neighboring, including Brazil, Paraguay, and Argentina; and to gather information regarding Uruguay's bluetongue (BT) status. Representatives included: Farouk Hamdy, Juan Lubroth, and Cristóbal Zepeda of the United States; and Assad Heneidi Zeckua of SAGAR, Mexico. During the visit, representatives:

- Reviewed the Uruguay's surveillance and control procedures with regard to FMD and BT.
- Inspected the Uruguayan Ministry of Agriculture's facilities, including its laboratories and regional facilities.
- Examined private livestock export facilities.
- Inspected border controls and customs facilities.
- Were briefed about actions that have strengthened the Ministry's ability to maintain its free status, and to recognize, detect, and contain any introduction of an FMD or BT outbreak.

With regard to Uruguay's FMD status, it was the opinion of the delegation that Uruguay has taken all appropriate measures to prevent the introduction of FMD from neighboring countries. The change in the epidemiological situation of neighboring countries does not jeopardize Uruguay's status as free from FMD without vaccination. With regard to BT, the delegation recommends that appropriate surveillance be conducted with statistically valid surveys to assess the serological status of susceptible animal populations.

## Background

The last recorded outbreak of foot-and-mouth disease (FMD) in Uruguay occurred in June 1990. Since 1995, Uruguay has been free from FMD without vaccination.

On August 9, 2000, Argentina gave notice the detection of FMD in the province of Formosa, bordering Paraguay. Two weeks later, on August 23, 2000, the southern state of Rio Grande do Sul in Brazil announced an outbreak of FMD, which led to the destruction of approximately 11,000 animals. Rio Grande do Sul was considered by Brazil and the OIE as free from FMD with vaccination. The reemergence of FMD in areas neighboring Uruguay changed the risk of reintroduction of the disease into that country.

## Emergency Measures Adopted by Uruguay

- August 9, 2000: Uruguay intensified its preventive measures and inspection activities at borders.
- August 11, 2000: Uruguay enacted a prohibition on the importation of meat and dairy products from Argentina and Paraguay.
- August 15, 2000: The prohibition on importation was extended to include hay and forages used as animal feed from Argentina and Paraguay.
- August 23, 2000: Uruguay adopted several emergency measures, including: the prohibition of imports from Brazil; the strengthening of inspection activities at borders; the surveillance of premises at the border with Brazil; the prohibition of animal movements from areas bordering the Brazilian state of Rio Grande do Sul; the requirement that cattle destined for slaughter be permitted only authorization from the veterinary service.
- August 24, 2000: Uruguay enacted serological sampling of all herds sent to slaughter originating from border areas with Argentina and Brazil.
- August 28, 2000: Uruguay designated facilities of Argentinean or Brazilian ownership as "risk premises." Animal movements on these premises were restricted.
- August 31, 2000: The Uruguayan government requested that the Armed Forces intensify surveillance activities to prevent the introduction of live animals from Brazil.

## **Objectives of the Visit**

### **September 21, 2000: Meeting at the Veterinary Services Headquarters**

On the first day of the visit, the group met with Chief Veterinary Officer and Director General of Livestock Services, Dr. Julio Barozzi and staff at the Ministerio de Ganadería, Agricultura y Pesca, in Montevideo. Dr. Barozzi's and his staff made a presentation on the structure of Uruguay's veterinary services. The emphasis of this presentation was placed on the emergency measures adopted in response to the FMD outbreaks in neighboring countries. A tentative agenda for the remainder of the site visit was discussed and approved.

Colonel Alejandro Varela, from the Armed Forces, explained the activities and coordination established with the Ministry of Agriculture. The delegation was assured that the Ministry of Livestock, Agriculture and Fisheries (MGAP) enjoys full support of military personnel and their infrastructure. The delegation was further informed that the closure of any one Department within Uruguay can be accomplished within 3 hours. Military posts are located along the borders. Military personnel along the borders conduct frequent movements and inspections of access roads to ensure that no illegal movements occur.

After these meetings, the delegation visited the Dirección de Control de Semovientes (DICOSE), a branch of the Ministry of Agriculture which controls all animal movements. Every livestock producer must be registered with DICOSE. A sworn statement on the number of animals existing in every premises is made each year. The animal identification system leading to herd of origin and proprietor used by DICOSE is very sophisticated and recorded every animal movement made. Federal Police in more than 240 posts countrywide, must review movement permits and are required to stamp permits indicating that each property's, owner's, or trucker's status is in good order. This stamp of approval is the first item checked by anyone receiving the animals "further down the road," including animal health authorities. Livestock moved within 50 kilometers of any international border without the proper permit and identification scheme are considered contraband. In such cases, the animals are taken and a fine is levied against the owner and/or trucker.

During the uncertain moments of the FMD occurrences in the region, Uruguay prohibited movements of their animals in the Police Sectors in each of the Departments that border Argentina and Brazil, and from those ranches in the interior the owners of which have livestock in the neighboring countries. The delegation felt that this method gives much credibility to any action plan required by Uruguay.

Later on the first day of the visit, the American delegation was received by the U.S. Ambassador to Uruguay, Christopher Ashby.

### *Conclusions*

The group felt that the Uruguayan Veterinary Service had taken the measures necessary to preserve Uruguay's FMD-free status. The team was particularly impressed by the close collaboration with the Army, and the general degree of knowledge about the situation.

**September 22, 2000: Visit to the Border with Brazil**

The team flew in an Air Force helicopter from Montevideo to the Brazilian border, in the Department of Cerro Largo. The trip provided an excellent opportunity to examine the Uruguayan countryside which provided the delegation with an understanding of the importance of livestock to the Uruguayan economy. The delegation flew over extensive grazing pastures of cattle and sheep. Uruguay has approximately 11 million cattle, 16 million sheep. Yet the population of Uruguay is only 3.3 million.

The helicopter flew along the Brazilian border. Uruguay shares an extensive "dry" border with Brazil and a shorter "wet" border on the East. The dry border consists of two fences which are 90 meters apart; cattle farms reach to the edge of the fences. Rural roads follow along and across the border. The Army has set up control points strategically located that are able to control the movement of people and potentially detect illegal animal movements. The team visited the border-crossing point of Rio Branco. The inspection procedures there seemed very efficient. All vehicles at this border-crossing are inspected and disinfected. The delegation was received at the military post of Rio Branco where Army officials made a presentation of their activities to support the Ministry of Livestock, Agriculture and Fisheries.

The delegation learned that the FMD outbreak in Rio Grande do Sul caused the price of beef to fall from approximately U.S. \$0.90 to \$0.60, making Brazilian beef cheaper than Uruguay's.

**September 23, 2000: Visit to the Argentine Border**

The delegation visited the military command in Salto, where we were received by Colonel Sergio d'Oliveira, who explained the activities performed by the army along the border with Argentina.

The team also visited a meat packing plant. We oversaw the process focusing on the traceability of the product. The plant is able, upon request, to identify the farms that contributed to each box of product. However, this identification is not done on a routine basis. Every carcass can be traced to its farm of origin; the exact origin of the animals is lost at de-boning. The plant seemed to efficiently operate. The official veterinarians at the plant seemed knowledgeable and kept good records.

The team then flew to Paysandú, a border town along the Uruguay river that makes the border with Argentina. Paysandú is close to the town of Concepción del Uruguay, where seropositive animals were detected on the Argentine side. The river is very wide at this point and it is unlikely that cattle could be smuggled from Argentina. The team visited the international border point in Paysandú, and further south in Fray Bentos. As on the Brazilian border, inspection at this border was rigorous and vehicles were being disinfected. Fray Bentos is the most important border point for commercial trucks coming from Argentina.

*General Comments*

Uruguay has increased surveillance activities throughout the country by routinely inspecting approximately 100% of all incoming vehicles across their land borders with Argentina (where

only one access road for cargo merchandise/imports is allowed) and Brazil. Confiscated material (mostly plant products) is destroyed on the premises with newly purchased and installed U.S. burners. Confiscated material is characterized, tabulated, and totaled. All vehicles are sprayed with either vanadine solution or Virkon-S, and must pass through a disinfection trough before further travel in Uruguay. The majority of the animal products seized are poultry products.

**September 24, 2000: Visit to Local Producers Association in the Department of Florida**

The delegation visited a quarantine station used for the shipment of cattle to Mexico. This is an open air quarantine, not a vector proof one. No animals were present during the team's visit. A general discussion on the exports of cattle to Mexico was held with an exporter, the official veterinarian at the quarantine station, and representatives of a shipping company.

**September 25, 2000: Visit to Uruguay's Central Laboratory and Carrasco International Airport.**

At Carrasco International Airport, two new x-ray type machines have been installed at the Montevideo airport and approximately 100% of the baggage there is checked for organic material. The operators there appear well trained. Casual interviews with the inspectors showed that they were knowledgeable and took their activities seriously.

The entire delegation thought that the efforts at the airport were generally very thorough, professional, and adequate.

Later, the delegation traveled to the veterinary services headquarters to discuss sampling procedures for FMD and BT. The survey procedures for FMD were explained. FMD serological surveillance studies have been conducted with more than 8,700 samples taken within 15 days of this report with negative findings (some positive serology has been seen in 8-9 year old animals sent to slaughter representing probable antibody from Uruguay's vaccination campaign). Serology for the FMD virus nonstructural proteins has been negative. Studies are ongoing on samples from cattle that receive inter-country movement authorization. No vesicular tissue collected from a suspect case is processed in Uruguay, Instead, samples are sent immediately to PANAFTOSA, Rio de Janeiro, for identification and isolation.

The team felt that serological surveillance could be further improved by focusing on risk assessment schemes developed by Uruguay in 1994, but not practiced fully in this heightened period of risk. The samples taken to date do not reflect proper sampling techniques. In addition, due to the changes in diagnostic practices at PANAFTOSA, we recommended that a parallel parcel be sent to the World Reference Laboratory, with the USDA assisting in any way possible.

*Bluetongue*

The U.S. team was asked to examine the situation regarding bluetongue. Uruguay claims to be free from disease. The team found that:

- No clinical evidence of BT has ever been reported in Uruguay. Rio Grande do Sul (Brazil), and Argentina make the identical claim.

- At least 12 species of *Culicoides* are known to occur in Uruguay, including *C insignis*. This last species is distributed throughout the country, with higher densities in the northern third. The distribution of other *Culicoides* is not known.
- Vector competence or vectorial capacity studies for the BT virus and *Culicoides* are not practical.
- More than 3,200 serological tests conducted in sheep in the past have not shown any positive reactors.

The visiting team felt the sampling schemes used for BT surveillance were inadequate (particularly with regard to the size of sampling and its stratification) and should be reevaluated.

### *Conclusions*

The team holds that, given the available information, it is not possible to adequately assess the status of Uruguay regarding BT. However, it would be possible to develop a protocol to allow the importation of live cattle into Mexico or the United States.

### **September 26, 2000: Closing Meeting**

An exit interview was held at the U.S. embassy with the U.S. and the Mexican ambassadors to Uruguay. The Ambassadors and their staff were briefed on the site visit and were very supportive.

### *The Uruguayan Press*

The press had been following the site visit very closely, with at least one reporter and one camera person at every stop. On the team's final day MGAP, authorities facilitated a press conference in Montevideo (with more than 40 reporters and several television crews). The team's interviews with the press stressed that the United States still considered Uruguay as FMD-free. The team also stressed that the visit was made to confirm and review the activities of the MGAP. We informed the press that although some differences of opinion may exist, there was absolutely no criticism. Many questions focused on when would the United States allow live imports. Our answers stressed that the visit was part of a process and that our report would have a bearing on a final decision.

Since Mexico had halted all the importation of products into their country, that country's delegate was challenged further. Mexico's position was that, as they had imported live animals, the risk was much greater than just importing de-boned meat, and, until the situation in the region stabilizes, their decision would stand.

## **Conclusions**

### *Foot and Mouth Disease*

The delegation feels that Uruguay has taken all the appropriate measures to prevent the introduction of FMD from neighboring countries. The change in the epidemiological situation in neighboring countries does not compromise Uruguay's status as an FMD free country without vaccination.

The group recommends that the measures that have been implemented be maintained as long as the regional situation, specially in Brazil, improves.

### *Bluetongue*

The group recommends that appropriate surveillance be conducted with statistically valid surveys to assess the serological status of the susceptible populations.

## ATTACHMENT 1: LIST OF PERSONS CONTACTED

1. Dr. Julio Barozzi, CVO, Direcotr General of Livestock Services
2. Dr. Carlos Correa Messuti, Director of International Services
3. Dr. Victor Lyford-Pike, Director, Central Veterinary Laboratory
4. Miguel Rubino, Central Veterinary Laboratory
5. Jose Sosa Dias, Agricultural Engineer
6. Dr. Hector Lazaneo, Direcotr, Division of Animal Industry
7. Dr. Ricardo Perez Rama, National Coordinator of Sanitary Campaigns
8. Dr. Hipolito Tapie Rey, Director, Animal Health Division
9. Lodin Firmin, President, Animal Sanitation Defense
10. Dr. Heber Artia Da Cunda, Regional Coordinator, Paysanda, Uruguay
11. Dr. Eduardo Paradiso, Paysanda, Uruguay