



The Chick Papers

A Monthly Newsletter from the Georgia Poultry Laboratory

November 2016

Laboratory Exercise for Avian Influenza: Can the Lab Handle the Volume?

On November 9, 2016, GPLN conducted an exercise where 420 samples in BHI tubes, some of them spiked with viral RNA, were “submitted” to the lab between 8 and 12 pm. Each sample was identified as to company and farm, as determined in our GIS system by a mock positive identified the day before in NE GA and 2 and 6 mile Zones drawn around them. The goal was to determine whether the lab could perform 400 AI PCRs in one day, as would be required in GA for surveillance during an event. Two companies were actively involved in the exercise by email contact throughout the day of the exercise.

In receiving, the technicians had access to a list of farms indicating whether the farms were in the 2 mile, 6 mile, or out of the Zone. They verified the identity of the company and farm, the accuracy of the information on the submission sheets, and prioritized the samples. The samples were assigned a barcode label and transferred to the biosafety cabinet nearby. There, they were taken out of plastic bags, wiped with bleach, taped with the barcode label and arranged in order in a rack. The scanning of the samples at that time automatically populated a PCR worksheet with the correct sample identification for every well that would be used later in the PCR lab.

The samples were placed in secondary containment and transferred to the BSL3 laboratory, which had been activated the day before upon the announcement of a mock confirmed case. The samples were run by 4 proficiency tested technicians in an organized fashion, using the NVSL protocols and reagents. As results were entered into LIMS 4-5 hours after receiving them, the positives were given priority (they were closed first). The results appeared “real time” on the internet portal, of which username and passcodes were given to the 2 companies involved, Dr. Cobb our state veterinarian, Dr. Smeltzer our USDA epidemiologist, Dr. Janemarie Hennebelle, responsible for permitting, and Dr. Stan Crane, responsible for surveillance in an event.

In tandem, the companies were asked to provide information about the age of the birds on the farms, and a few permits were requested through the GDA portal, approved, written and sent back to the companies. By 6pm, all 420 results had been entered into LIMS.

LESSONS LEARNED AND FOLLOW UP:

We tested the samples with no hiccups. All samples kept their identity and all tests and controls came out perfectly. We made the following improvements:

- Three changes to facilitate portal use
- Three LIMS changes for enhancement of speed, efficiency and accuracy
- Looking for longer pipettes and better adhesion of the bar code labels onto the tubes

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Tours and Visitors

- November 2: Merck meeting and posting session
- November 14: USDA meeting and tour
- November 14: Gracie Findley trained at the lab
- November 15: South Korean delegation tour
- November 18: Chinese delegation tour
- November 22: Georgia Poultry Federation meeting
- November 29: Chinese delegation meeting and tour
- November 30: Nathan Phillips toured the model



Dr. Zavala gives a tour to the South Korean delegation.



The South Korean delegation observing a foaming demonstration.

Model Update

The model is really starting to take shape! Our artist August Hoerr is currently painting the backdrop of the Savannah Port. Bob Wheeler is designing the Industrial Park and Dave Bennett and Jeff Huber with Train Installations are building the city. We are very pleased with the progress so far. If you have not stopped by to take a look at the model, please do!



The scenery around the chicken houses is coming to life!



Bob Wheeler is hard at work building a runoff area.



Mountains, the lake and the power station.



Freddie Smith and Jeff Huber are shaping a hill for the landscape.



August Hoerr is doing a fantastic job painting the backdrop for the Port of Savannah.



Dave Bennett is designing the landscape using foam insulation.

GPLN Events

- November 8-9: AI preparedness exercise
- Zach Baker and Belinda Pham left the GPLN family to pursue new opportunities. We will miss them both and wish them the very best in their future endeavors!
- Mhoire Williams joined GPLN as a part-time Administrative Assistant on November 29. We are so excited to have her on the GPLN team!



Len Chappell, Heath Jackson and Zach Baker at Zach's going away party on November 16.



Zach Baker, Tyler Reed, Len Chappell and Heath Jackson performing a Kifco foaming demonstration at the Hall County Fire Academy on November 23.



Mhoire Williams

