

The Chick Papers

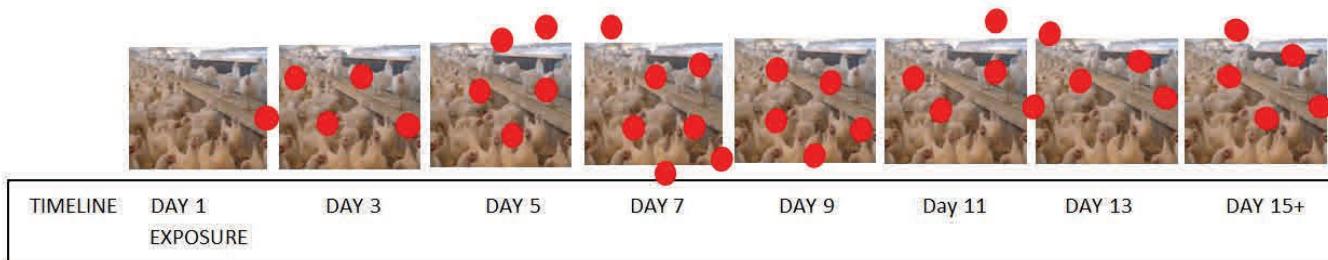
A Monthly Newsletter from the Georgia Poultry Laboratory

July 2017

Mycoplasma Testing on Breeder Flocks

GPLN utilizes three Mycoplasma detection tests. For antibody detection, the ELISA test is highly sensitive and may give a few false positives, especially after inactivated vaccines are given to the birds. The positive ELISA samples are checked with the more specific HI test for confirmation. The PCR test (antigen detection) detects the presence of the organism in the tracheas of the chickens. HI positive (serologically positive) flocks are swabbed for PCR (antigen detection). To call a flock positive, we use what has been termed the “Two-Test Rule” - the serology and PCR tests are both positive (or two consecutive serology or PCR tests are positive on two separate samplings). Table I shows an approximate timeline of positivity after infection:

Table I



PCR	NEG	POS						
ELISA	NEG	NEG	NEG	POS	POS	POS	POS	POS
HI	NEG	NEG	NEG	NEG	NEG	POS	POS	POS

List of recommendations for breeder flocks:

1. **Test pullets at 10-12 weeks of age.** 15 samples per house for serology only.
2. **Test on PCR before any bird movements.** Pullets to breeder house, spike males to breeder house: 15 swabs per house within 10 days of movement.
3. **Test routinely with serology:** 30 samples per house every 12 weeks. In NE GA: In between sampling (every 6 weeks) - 15 samples per house.
4. **Test tracheal swabs on PCR after an HI positive or suspect result (see Table 2).** 30 birds per house for every house on the farm. Suspect HIs usually turn out to be positive.
5. **Retest flocks on serology if the ELISA titers are high.** This would be the situation illustrated on Days 7-9 above. Even if the HI test is negative, it is very important to re-sample flocks that have 10% of the ELISA titers over 2000. Antibodies to Mycoplasma can be picked up earlier on the ELISA than the HI.
The ELISA may be indicating a very early infection, even though the flock is HI negative.

TABLE 2		HI Titers		
Test	Negative	Suspect	Positive	
HI:MS	0	20	≥40	
HI:MG	0,20	40	≥80	

GPLN can provide assistance in collecting tracheal swabs when serology suggests a Mycoplasma infection.
This allows service personnel to be away from the suspect farm until a diagnosis is confirmed on PCR.

Tours and Visitors

- July 11: Chinese delegation
- July 26: Country Charm Eggs
- July 27: Riverside Military Academy



Visitors from Country Charm Eggs toured the lab on July 26.



Delegates from China visited the lab on July 11.



Model Update

The diorama is finally nearing completion! Almost all of the trees have been planted throughout the landscape and we are now focused on the detailing of buildings and scenery.

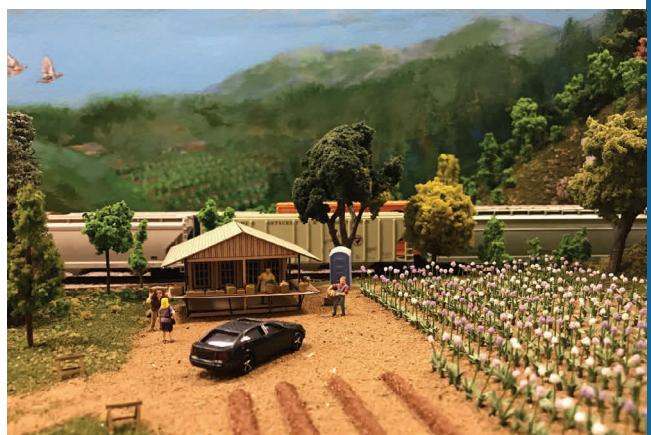
If you have not seen the diorama recently, feel free to schedule a tour. New details are emerging every day!



The vast majority of the trees have been planted! Creation of the trees was a tremendous undertaking. Great thanks to Bob and Halina Wheeler for their fantastic work!



A cotton farm with the Port of Savannah in the background.



A local farmer's market with a crop of onions. Note the blueberry farm and quail in the background.